

Grounding Retrospective Solvency Analyses in Contemporaneous Information (3 of 3)

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Courts frequently use contemporaneous information to assess a debtor's solvency as of the date a disputed transfer was made or a disputed obligation was incurred. This is the final of three papers that provides a business valuation practitioner's perspective on how to use contemporaneous information to assess the debtor's solvency on the relevant date. This paper addresses the three financial tests (balance sheet, capital adequacy, and ability to pay debts) performed by experts retained in connection with a litigation.

Introduction

This is the third in a series of three papers that provides a practitioner's perspective on how to ground retrospective solvency analyses in contemporaneous information. The first paper provided an overview on fraudulent transfer and preference lawsuits and explained how contemporaneous market prices for the debtor's stock and debt securities are used to assess the debtor's solvency on a particular date. The second paper addressed other contemporaneous indicators of a debtor's solvency or insolvency on a particular date. This final paper addresses the solvency analyses performed by testifying experts retained in connection with litigation.

It could be said that business valuation is more art than science. Nevertheless, business valuation in general, and in the context of fraudulent transfer and preference lawsuits in particular, must be performed within certain confines. There are shades of gray within most confines, and the answer to many questions is, "It depends." This paper (and the preceding two papers) endeavors to provide context for practitioners who have to answer difficult solvency-related questions.

Introduction to the Three Financial Tests of Solvency

Most debtors file for bankruptcy when they are insolvent. Debtors typically file for bankruptcy when

they cannot make a required interest or principal payment on their interest-bearing debt. A debtor's inability to make these payments is often due to a lack of capital. Debtors who have a lack of capital often have assets that are worth less than their liabilities. It is perhaps for these reasons that the three financial tests of insolvency in fraudulent transfer lawsuits are:

- assets worth less than liabilities ("balance sheet test");
- lack of capital ("adequate capital test"); and
- inability to service or repay debts ("ability to pay debts test").

The financial tests of insolvency are positively correlated, but the coefficient of determination is likely less than 1.0.¹ Thus, it is possible for a debtor to pass one or two of these tests and fail the other two or one of these tests at the same time. This observation matters because a debtor that fails just *one* of these tests is deemed to be insolvent in a fraudulent transfer matter.²

As a practical matter, there are two ways to think about the interrelationship of these financial tests. First, a debtor may have assets in excess of its liabilities, but its "solvency cushion"³ may be too meager to support a finding that the debtor was adequately capitalized and/or able to pay its debts. Second, a debtor may have liabilities

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¹I am not aware of any formal studies. However, logic dictates that the coefficient of determination has to be less than 1.0 because perfect correlation would render two of the three financial tests moot. The appellate court made this point in *Moody. Moody v. Security Pacific Business Credit, Inc.*, 971 F.2d 1056, 1070 (3rd Cir. 1992).

²There is only one financial test (balance sheet test) for preference lawsuits.

³"Solvency cushion" refers to the degree in which a debtor passes the balance sheet test. The relevance of the "solvency cushion" is discussed later herein.

in excess of its assets, but it may be able to stave off bankruptcy if its creditors are forbearing.

It is common for testifying experts to address these financial tests of insolvency. Sometimes one testifying expert will address each of these financial tests. In other instances, one testifying expert may address the balance sheet test, while another may address the adequate capital and/or ability to pay debts tests due to the different skill sets required to execute these tests.⁴ This paper addresses the analyses that are performed for these three financial tests.

Solvency Test #1: Balance Sheet Test

The balance sheet test compares the value of a debtor's assets with the amount of its liabilities. The federal bankruptcy code defines insolvency as a "financial condition such that the sum of such entity's debts is greater than all of such entity's property, at a fair valuation..."⁵ The appellate court in *Covey* provided a clearer definition:

[t]o decide whether a firm is insolvent within the meaning of § 548(a)(2)(B)(i), a court should ask: What would a buyer be willing to pay for the debtor's entire package of assets and liabilities? If the price is positive, the firm is solvent; if negative, insolvent.⁶

The analysis for this test is focused on a gross (assets minus liabilities) basis, not a net (equity) basis. This is so because equity (i.e., a residual claim on the debtor's assets) is always positive due to limited liability, which is why equity trades at "option value" when the debtor is insolvent. The appellate court in *Covey* explained:

The assumption of a buyer having assets exceeding the liabilities to be acquired is important. A stumblebum would pay 1¢ for the most hopelessly insolvent firm, as the deal puts none of the bum's nonexistent assets at risk and could pay off if the debtor unexpectedly strikes it rich.⁷

⁴It is common for testifying experts to opine on the relevance of (a) the debtor's stock and debt security prices and (b) other contemporaneous indicators of solvency or insolvency in connection with their assessments for these financial tests. These topics are not addressed in this paper because they were addressed in the first two papers of this series.

⁵This is the definition of "insolvent" in 11 U.S.C. § 101(32). This definition is "with reference to an entity other than a partnership and a municipality," which covers most corporate debtors. The balance sheet test excludes from the calculations "property transferred, concealed, or removed with intent to hinder, delay, or defraud such entity's creditors" and "property that may be exempted from property of the estate under section 522 of this title."

⁶*Covey v. Commercial National Bank of Peoria*, 960 F.2d 657, 660 (7th Cir. 1992).

⁷*Covey v. Commercial National Bank of Peoria*, 960 F.2d 657, 661.

Standard of value and premise of value

The standard and premise of value are overriding assumptions that affect all valuation analyses. Thus, we will address the standard and premise of value first.

The standard of value:

is a definition of the type of value being sought...[it] usually reflects an assumption as to who will be the buyer and who will be the seller in the hypothetical or actual sales transaction...In other words, the standard of value addresses the questions: "value to whom?" and "under what circumstances?" The standard of value, either directly by statute or (more often) as interpreted in case law, often addresses what valuation methods are appropriate and what factors should or should not be considered.⁸

The premise of value:

is an assumption as to the set of actual or hypothetical transactional circumstances applicable to the subject valuation (e.g., going-concern or liquidation)...While virtually any business enterprise may be appraised under each of these [] alternative fundamental premises, the value conclusions reached under each premise, for the same business, may be dramatically different.⁹

Some practitioners have provided additional perspective in the context of fraudulent transfer and preference lawsuits. Bernstein, Seabury, and Williams observe:

In isolation, "value" is an unhelpful word...value begs context. Context comes from the purpose for the valuation and the ultimate standard and premise of value employed. Thus, to determine the value of a debtor at any given point in time, an expert should first determine the appropriate standard and premise of value, for example, the fair market value of the debtor as a going concern.¹⁰

...the determination of going concern versus failing concern is critical. Section 101(32) requires the insolvency determination to be made by a "fair valuation" and, not necessarily, at a fair value. Contrary to conventional wisdom, a fair valuation is *process sensitive* and not *result sensitive*. Thus, a fair valuation initially requires a determination of what range of values would be acceptable, given the status of the debtor. Thus, if the debtor is a going concern, then one would expect a range of values congregating around fair market value; whereas, if the

⁸Shannon P. Pratt and Alina V. Niculita, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw Hill, 2007), 41.

⁹*Id.* at 41 and 48. The "[]" in the quote removed the reference to four premises. Three of the four premises are different versions of the liquidation premise.

¹⁰Stan Bernstein, Susan H. Seabury, and Jack F. Williams, "Squaring Bankruptcy Valuation Practice with Daubert Demands," *ABI Law Review* 16 (2008):161, 172.

debtor is a failing concern, then one would expect a range of values from an orderly liquidation to a forced liquidation (emphasis in original).¹¹

Standard of value—Assets

Most disputes among testifying experts, in the context of the balance sheet test, are focused on the debtor's business enterprise value. Testifying experts typically focus on the debtor's business enterprise value because it is an efficient proxy for the value of the debtor's assets.¹² Testifying experts typically do not focus much on the quantification of liabilities because the amount of liabilities is generally not controversial.¹³

Notwithstanding the focus on the debtor's business enterprise value, the federal bankruptcy code does not provide a definition for "fair valuation."¹⁴ Thus, it is possible for opposing testifying experts to arrive at different values for the debtor's business enterprise (or assets) based solely on the definition used for "fair valuation."

There are two potential standards of value that can be used in a solvency analysis. One standard of value is focused on the debtor's business as it stands, which includes its outstanding debts on the transfer date. This standard of value parallels the fair value standard applied in Delaware fair value cases because it values the debtor's business in the hands of its current owners. The other standard of value is focused on the sale price that would be expected if the debtor's business was sold to a hypothetical buyer on the transfer date without regard to the existing outstanding debt. That is, the hypothetical buyer acquires the assets "free and clear" of outstanding debts, and the hypothetical seller settles up with creditors from the proceeds. This standard of value parallels the fair market value standard because it values the debtor's business in the hands of another market participant.

Many courts appear to focus on the fair market value standard when executing the balance sheet test. The appellate court in the seventh circuit (as previously mentioned in *Covey*) focused on a standard of value that assumed the sale of the debtor. The appellate court in the third circuit (in *TWA*) focused on a similar standard.¹⁵

¹¹*Id.* at 179.

¹²As a practical matter, enterprise value understates asset value because it excludes working capital-related liabilities (and by extension corresponding assets). However, this exclusion does not bias the analysis because practitioners do not subtract working capital-related liabilities from enterprise value when executing the balance sheet test.

¹³There are exceptions to this general rule (e.g., quantification of liabilities with unknown amounts), which are discussed later herein.

¹⁴The key term—"at a fair valuation"—is not defined in the Bankruptcy Code." Robert J. Stearn, Jr., "Proving Solvency: Defending Preference and Fraudulent Transfer Litigation," *The Business Lawyer* (2007):359, 361.

¹⁵In *Re: Trans World Airlines, Incorporated*, 134 F.3d 188, 195 (3rd Cir. 1998).

Many other cases also refer to a fair market value standard.

To the extent there is a debate over which standard of value should be used, the choice becomes more important when the debtor is financially distressed. This is so because the plaintiff, who believes the debtor was insolvent, also believes (explicitly or implicitly) that the debtor was financially distressed.

The plaintiff's testifying expert may opine that the debtor's financial distress should be incorporated in the valuation, which can manifest itself in many ways. For example, he or she may reduce the contemporaneous forecasted cash flows due to a lack of capital to fund the required investments. Alternatively, he or she may increase the discount rate (relative to a nondistressed debtor in this debtor's industry) to incorporate the risk from financial distress. Many practitioners would agree that incorporation of this financial distress (assuming the debtor was financially distressed for argument's sake) is appropriate under the fair value standard of value.

However, the defendant's testifying expert may opine that the incorporation of financial distress is not appropriate under the fair market value standard of value. A debtor's financial distress can sometimes be "cured" in a change-in-control transaction where another buyer (strategic or financial) can recapitalize the debtor and remove the source of financial distress.¹⁶ Recall that the fair market value standard assumes the hypothetical buyer acquires the assets "free and clear" of outstanding debt. As will be explained in the next section, a reasonable marketing period is assumed to have occurred before the transfer date, which means the debtor's inability (due to financial distress) to conduct a reasonable sale process after the transfer date is irrelevant.¹⁷ It is for these reasons that the debtor's financial distress should not be a *large* factor under the fair market value standard of value when the potential acquirers for the debtor's business are not distressed themselves. This is so because large arbitrage opportunities would be abundant if buyers could routinely acquire distressed companies on the cheap, instantly cure the debtor's financial distress through a recapitalization, and lock in substantial risk-free profits.¹⁸

¹⁶Some causes of financial distress (e.g., a debtor affected by the introduction of a disruptive technology that renders its business plan obsolete) cannot be cured in a change-in-control transaction.

¹⁷For context, the courts (bankruptcy, district, and appellate) in *Re: Trans World Airlines, Incorporated* found that a twelve- to eighteen-month marketing period was reasonable, notwithstanding the fact that the debtor subsequently filed for bankruptcy less than ninety days after the transfer date.

¹⁸There are firms that specialize in turning around financially distressed companies that expect to profit from their endeavors. This explains why the debtor's financial distress should not be a large factor, as opposed to not being a factor at all.

Interestingly, a financially distressed debtor may pass the balance sheet test under the fair market value standard but fail the adequate capital test and/or ability to pay debts test under an implied fair value standard.¹⁹ As discussed later in this paper, courts often focus on the debtor's forecasted ability to maintain liquidity, and service and repay the debts it had on the transfer date under the assumption that the debtor's current owner(s) remains in place. Thus, one can infer that courts tend to use one standard of value for the balance sheet test and another standard of value for the adequate capital and ability to pay debts tests. On the one hand, this could suggest an internal inconsistency that should be fixed. On the other hand, this could suggest a distinction that results in greater independence between these financial tests of solvency.²⁰

Marketing period

The fair market value standard of value requires an assumption regarding the marketing period that precedes a hypothetical sale to a third party. This assumption is required because the valuation of the debtor's assets is as of the transfer date, but there sometimes is insufficient marketing of the debtor's assets prior to the transfer date to effectuate a sale. Said differently, the valuation assumes a hypothetical sale of the debtor on the transfer date, and this sale is assumed to have occurred with the benefit of an adequate marketing period.

The proceeds from the sale of a business (or asset) are often positively correlated with the duration of the marketing period. Thus, a seller that uses a "normal" marketing process typically receives more proceeds than a seller that is forced to undertake a "fire sale" process. For example, consider the sale of a house. Two similar houses may be sold at significantly different prices if one of the homeowners is forced to sell immediately while the other homeowner has the option to hold out for a better offer.

The appellate court in the third circuit addressed the marketing period that precedes a "fair valuation" of the debtor's assets in *TWA*. The debtor in *TWA* was an airline. The defendant's testifying expert arrived at a relatively high valuation in part by assuming the debtor "was not compelled to sell the assets under any time constraint."²¹ "In other words, [the defendant] maintains that the value

of the assets is to be measured by the price that could be obtained if [the debtor] could hold out for as long a period as necessary to receive a "full" price on its assets."²² The plaintiff's testifying expert arrived at a relatively low valuation in part by assuming the debtor's assets must be sold within a "reasonable time period," which this expert believed was twelve to eighteen months.²³ The courts (bankruptcy, district, and appellate) agreed with the plaintiff's testifying expert. The appellate court stated:

We begin our analysis by recognizing the overwhelming body of authority that makes clear that a fair valuation of assets contemplates a conversion of assets into cash during a reasonable period of time. The question then becomes how to construe whether a given time period is reasonable... We believe that the proper point of reference for determining a "reasonable" time period in the case of § 101(32)(A) should begin with the *financial interests of the creditors*. The reasonable time should be an estimate of the time that a typical creditor would find optimal: not so short a period that the value of the goods is substantially impaired via a forced sale, but not so long a time that a typical creditor would receive less satisfaction of its claim, as a result of the time value of money and typical business needs, by waiting for the possibility of a higher price. This test satisfies the requirement of a fair valuation because it identifies, as best it can, the equilibrium point between the two competing concerns of creditors: the desire to maximize the dollar figure from the assets to be sold, and the desire to have the assets sold off quickly to satisfy creditors' claims sooner rather than later (emphasis added).²⁴

Implication of marketing period assumption

The marketing period assumption highlights an interesting nuance for fair market value determinations. The plaintiffs in *Vlasic* and *Idearc* argued that the debtors would incur a substantial cost if they sold their assets during the first two years after the transfer date. This alleged cost resulted from the tax-free treatment for the spin-off of these debtors from their parent companies.²⁵ The courts did not agree with the plaintiff's characterization of this potential liability.²⁶

²²*Id.* at 194.

²³*Id.* at 192.

²⁴*Id.* at 194–195.

²⁵The debtors in both *Vlasic* and *Idearc* were separated from their former parent companies through spin-offs that were not taxable to their parent company or their parent company's shareholders. These debtors were contractually obligated to indemnify their former parent company and their former parent company's shareholders for the costs they would incur if the spin-off company took actions that caused the spin-off to no longer receive tax-free treatment.

²⁶The same testifying expert addressed the tax-related issues for the defendant in *Vlasic* and *Idearc*. The court in *Vlasic* agreed with this expert, who testified that the debtor could sell assets during the two-year period after the spin-off, and not cause the spin-off to become taxable, if changed circumstances necessitated the sale. *Vlasic*, 2005 WL 2234606, *28. The court in *Idearc* also agreed with this expert. *Idearc*, 2013 WL 230329, *23–*24.

¹⁹As explained in the first paper of this series, it could also be said that courts apply the standard of value that is implied by the debtor's security prices when the securities are publicly traded and the prices are reliable indicators of their value. There is a range of prices (and implied yields) on the debtor's debt securities that often suggests the debtor was adequately capitalized and able to pay its debts (or not).

²⁰Recall that there are three financial tests for solvency in fraudulent transfer lawsuits, and the plaintiff only has to prevail on one of them in order to establish that the debtor was insolvent.

²¹*TWA*, 134 F. 3d 188, 191.

However, for argument's sake, we will discuss how a business valuation practitioner can address this issue if the courts had agreed with the plaintiff's characterization of this potential liability. Following the logic espoused by the third circuit in *TWA*, the debtor's management would *not* sell these assets during the first two years after the transfer date to avoid the incurrence of this large obligation. The discussion in *TWA* was admittedly about the marketing period that preceded the transfer date, but the same logic (i.e., making decisions that are in the "financial interests of the creditors") should hold for the period after the transfer date as well.

The delay of a hypothetical sale can effectively convert a fair market value standard of value into a blended fair value/fair market value standard of value. We will assume that the value of a debtor that incurs a large cost when its assets are sold is maximized in the hands of its current owner. This would have clearly been the case for the debtors in *Vlasic* and *Idearc* if the courts had agreed with the plaintiff's characterization of the potential tax-related liability. Thus, the fair market value was substantially less than the fair value for these debtors' business enterprises. The fair value standard of value should prevail in this instance (at least for the first two years after the transfer date) because the debtor's creditors would presumably prefer the status quo over a value-destroying sale.

The district court in *Vlasic* agreed with this logic. The district court disregarded the plaintiff's testifying expert's argument that an illiquidity discount should be applied to the valuation of the debtor's business enterprise due to the potential tax-related restriction on the sale of assets. The court stated:

[The plaintiff's testifying expert] next applied an illiquidity discount of 25% because of the TIA restrictions that prevented [the debtor] from selling the majority of its businesses within two years without complying with certain conditions. [He] supported his illiquidity discount theory with studies of restricted stock.

That illiquidity discount was not warranted. Unlike an owner of stock who is restricted from selling his shares, [the debtor] had the flexibility to effect a sale within two years of the Spin-off, if changed circumstances necessitated it. [The debtor] also had the ability to, and in fact did, *gain economic returns by operating its business for cash*, which is completely unlike a person restricted from realizing a return on illiquid stock. [The plaintiff's testifying expert] could identify no other analyst who applied such an "illiquidity discount" in valuing [the debtor] (emphasis added).²⁷

²⁷*Vlasic*, 2005 WL 2234606, *28. The court cited the defendant's testifying expert to support the position that the debtor could operate its business for cash.

The preceding discussion raises an interesting question: What is the "fair valuation" of a debtor's business enterprise (or assets) when its "highest and best use" is in the hands of its current owners? Focusing on the fair market value standard in general, and the price a willing buyer would pay in particular, results in a value-destroying transaction. However, the fair market value standard also requires a willing seller. A willing seller would not consent to a value-destroying sale. One court (as previously discussed in *Vlasic*) observed that a debtor could "gain economic returns by operating its business for cash" for two years to avoid the incurrence of a sale-related liability. Another court may one day (if it hasn't already) find that a debtor could "gain economic returns by operating its business for cash" into perpetuity when its "highest and best use" is in the hands of the current owners. This finding appears to be consistent with a "fair valuation" as it would be in the "financial interests of the creditors."

Another way to frame this issue is to consider the circumstances when a lender extends credit to a debtor. Creditors lend money to a debtor with a specific ownership structure, and credit agreements often have change-in-control provisions. Thus, it is hard to rationalize a hypothetical sale in a value-destroying transaction when many of the debtor's creditors did not make their decision to lend to the debtor under such circumstances and obtained protections to guard against such an outcome.

The preceding discussion may appear to some as "defendant-friendly" (i.e., heads I win; tails you lose) because it assumes a hypothetical sale when it is accretive and ignores a hypothetical sale when it is dilutive. This result occurs because it is consistent with how a debtor's managers, acting in the debtor's best interests, would likely act in the real world.

Standard of value—Liabilities

The standard of value for liabilities depends on the type of liability that is being valued and the purpose of the valuation. The inconsistent treatment is used for logical reasons.

All liabilities are valued at what a business valuation practitioner would consider to be a "fair valuation" when identifying the debtor's business enterprise value through the stock and debt approach.²⁸ For example, a bond that has a \$10 million face value and trades for \$5 million is valued at \$5 million for business enterprise valuation purposes. It is logical to use the \$5 million market value because the whole point of the exercise is to sum the market value of claims on the debtor. Any testifying

²⁸The stock and debt approach was addressed in the first paper of this series.

expert that uses the \$10 million face value would overstate the market's valuation of this debtor's business enterprise by \$5 million.

Most of these same liabilities (i.e., all liabilities with known amounts) are valued at face (or par) value when identifying the threshold that the business enterprise value must exceed ("liability threshold") in order to pass the balance sheet test.²⁹ For example, the previously mentioned bond is a \$10 million liability despite the fact that its market value is \$5 million.³⁰ It is logical to use face value for these liabilities in this context because it is the amount that the debtor owes on the obligation.³¹

The inconsistent standard of value for most liabilities allows practitioners to avoid a tautological solvency determination. Debtors would never fail the balance sheet test if all liabilities were valued at their market value (or another formulation of "fair valuation" that is consistent with fair value or fair market value) when identifying the liability threshold. This result occurs due to the circular nature of business enterprise and debt valuation. As a debtor

approaches insolvency, the debtor's business enterprise and the debt claims on the debtor decrease in value. As a debtor's insolvency deepens, virtually all of the marginal losses are borne by the debtor's creditors, while the debtor's equity still trades at a positive amount due to "option value."³² This is why it is illogical to use the market value of debt when quantifying the liability threshold.³³ The use of face value, on the other hand, ensures that a debtor will be found insolvent when the fair valuation of the debtor's assets is low enough.

Liabilities for unknown amounts (e.g., contingent liabilities) are the exception to this rule. These liabilities are treated differently because they do not have a face value like a debt obligation. A debtor owes \$10 million on a debt obligation that has a \$10 million face value. A debtor does not owe \$100 million on a potential liability associated with a lawsuit just because the plaintiff sues the debtor for \$100 million. This debtor may ultimately owe nothing, \$100 million, or something in between. Furthermore, the present value of the obligation is often less than the amount that will be paid in the future due to the time value of money.

It is for this reason that liabilities with unknown amounts are typically assessed at what valuation practitioners would consider to be a "fair valuation" when arriving at the liability threshold. The "fair valuation" of these liabilities is the expected amount that the debtor owes on these obligations as of the transfer date. Said differently, the "fair valuation" of these liabilities is the amount that the debtor would have to pay another firm to assume these obligations on the transfer date.³⁴

²⁹The balance sheet test can be boiled down to this simple equation: Enterprise Value minus Liability Threshold. A positive amount results in solvency, while a negative amount results in insolvency.

³⁰Zero coupon debt does not neatly fit into this description. Consider a zero coupon bond that raises \$50 when it is issued, and the debtor has to pay \$100 to the lenders when this bond matures at some point in the future. This zero coupon bond essentially consists of two components: principal and future interest payments. If this was an interest-bearing bond issued at market rates, it would have a \$50 face value. Following this logic, the effective face value on the issue date for this zero coupon bond is \$50, not the \$100 that is owed at maturity. The effective face value increases over time as interest expense is accrued and not paid, which is why it is called a zero coupon bond. Thus, the effective face value of a zero coupon bond is the accreted value on the valuation date, which is the amount the debtor owes the lender on this date. The same logic could apply to debt that was issued at below (or above) market rates. This debt will have a relatively high (low) face value that is reduced (increased) over time for accounting purposes as the debtor pays below (above) market interest rates. On the one hand, an argument can be made that the face value should be reduced (increased) to reflect the intangible asset (liability) associated with the below (above) market interest rates. On the other hand, an argument can be made that this intangible asset (liability) could be eliminated if the debtor's assets were sold. That is, the debtor has to (can) pay the relatively high (low) face value and cannot continue to benefit (detriment) from the relatively low (high) interest rates. Thus, the treatment of debt issued at below (above) market rates may be dependent on the standard of value that is used in the valuation. A hypothetical sale could eliminate this intangible asset (liability), whereas a fair value standard would allow (cause) the debtor to benefit (detriment) from this intangible asset (liability). A prudent management team would presumably seek to preserve the intangible asset from below market rates or eliminate the intangible liability from above market rates. I am not aware of any cases that have addressed this topic.

³¹It could be argued that some debtors may reasonably be forecasted to retire their debt obligations at substantial discounts to face value when these debt securities trade well below par. That may be true, but practitioners should acknowledge why the lender is willing to accept that deal. Very few (if any) lenders would participate in such a transaction if they believed the debtor was solvent. Thus, the fact that lenders may be willing to participate in such a transaction is a strong contemporaneous indicator of insolvency. Nevertheless, it is possible that an insolvent debtor may become solvent after the debt is retired at a substantial discount to par. For example, this result could happen if the lender was willing to sell its debt claim at a steep discount to par in exchange for stock in the debtor.

³²Equity retains "option value" because its downside is limited to zero, whereas its upside is unlimited.

³³The appellate court in *Re: Trans World Airlines, Incorporated* explained: "We agree with [the plaintiff] that we must consider the face value of [the debtor's] publicly traded debt rather than the market value. This follows from our determination that we must treat [the debtor] as a 'going concern.' Because we treat [the debtor] as a going concern, we cannot consider the market's devaluation of [the debtor's] debt resulting from the possibility as of the date of the transfer that [the debtor] would cease operations and be unable to satisfy its promises. It is this devaluation that creates the difference between the face value figure urged by [the plaintiff] and the market value figure [the defendant] would have us adopt: the former represents the net present value of [the debtor's] obligations, while the latter represents the net present value of [the debtor's] obligations but discounted by the likelihood that [the debtor] will be unable to pay its debts in full... Because our going concern methodology precludes us from devaluing [the debtor's] debt based on creditors' perceptions of [the debtor's] viability, a fair valuation of [the debtor's] public debt is the face value of that debt. *TWA*, 134 F. 3d 188, 196-197. Also see Robert J. Stearn, Jr., "Proving Solvency: Defending Preference and Fraudulent Transfer Litigation," *The Business Lawyer* (2007):359, 382. This paper states that certain decisions have "clarified that liabilities should be valued at face value regardless of whether the debtor was a going concern."

³⁴As a practical matter, a firm that would take on these obligations would likely charge the debtor for its services. Thus, this example may overstate the liability because it overlays this firm's cost of doing business and expected return on its investment on top of the debtor's actual exposure to these liabilities.

Premise of value: Going concern versus orderly liquidation versus forced liquidation

Practitioners need to address the premise of value after addressing the standard of value. The three premises of value are: going concern, orderly liquidation, and forced liquidation. Most valuations for the balance sheet test are performed under the going concern premise.

The going concern premise assumes that the debtor's business will continue to be operated for the foreseeable future. However, the going concern premise does not automatically result in a solvency determination. The going concern premise is a valuation construct that assumes a business will continue to be funded even if it cannot service and/or repay its debts.³⁵ In reality, such a business will be unable to operate into perpetuity. Fortunately, the analysis will establish that the debtor is insolvent in this situation.

The orderly and forced liquidation premises assume that the debtor's business will be shut down in the near future. A debtor is typically worth more under the going concern premise because its business enterprise is often worth more than the sum of its parts. This intangible value is lost (or greatly diminished) when the liquidation premises are used.³⁶

The difference between the two types of liquidation premises is the marketing period used to sell the debtor's assets on a piecemeal basis. The orderly liquidation premise assumes a normal marketing period, whereas the forced liquidation premise assumes a shorter marketing period. Thus, the orderly liquidation premise typically results in greater values than the forced liquidation premise.

As a practical matter, disputes over the premise of value occur more often in preference lawsuits than fraudulent transfer lawsuits. This result occurs because the debtor often files for bankruptcy within ninety days of the transfer date in preference lawsuits,³⁷ whereas the debtor frequently does not file for bankruptcy until over a year (sometimes almost six years) after the transfer date in fraudulent transfer lawsuits.³⁸ Thus, it is typically easier

to argue that the debtor was on its so-called "deathbed" in preference lawsuits than it is in fraudulent transfer lawsuits.

One notable case that undertook a "going concern versus deathbed" analysis is *Heilig-Meyers*.³⁹ The bankruptcy court stated that "[t]he going concern threshold is *very low*; a debtor may be financially unstable, but it is still a going concern as long as the amount it could realize from converting its assets to cash in the ordinary course of business exceeds the expenses of conducting business (emphasis added)."⁴⁰ The district court stated "[t]he conclusion that a debtor is a going concern or on its deathbed dictates whether to value the debtor's assets based on their liquidation value or the value they would fetch if sold over a reasonable period of time; the assumption being that a going concern could wait for a better offer and presumably a higher price. As such, there is value to being a going concern."⁴¹ The bankruptcy and district courts' findings in *Helig-Meyers* are consistent with the appellate court's finding in *TWA*:

"[b]ecause liquidation in bankruptcy was not *clearly imminent* on the date of the challenged transfer, we concern ourselves with how to achieve a fair valuation of [the debtor's] assets on a 'going concern' basis (emphasis added)."⁴²

Bernstein, Seabury, and Williams observe that "[a]lthough the term [deathbed] is quite colorful, it has little practical analytical significance."⁴³ They proffer that the choice between a going concern and liquidation is not binary as:

"[i]n the bankruptcy field, the status of a business is best understood as falling along a continuum of conditions ranging from going concern to failed concern, the labels we attach to both termini. Technically, status may be understood as a vector of business conditions ranging from going concern (growing) to going concern (static) to going concern (declining) to failing concern to failed concern. Our cases tend to truncate the determination, then, by concluding that either one or the other extreme is applicable. To be sure, the truncating (or rounding off) the business status is not unreasonable and has practical support; however, that approach does not use all the relevant facts available in a case and paints an inaccurate picture of the business condition."⁴⁴

³⁵Consider a debtor that is expected to lose a substantial amount of money into perpetuity. A valuation using the going concern premise will establish that this debtor's assets are worth substantially less than its liabilities. This valuation implicitly assumes a wealthy benefactor will finance these losses. In reality, there will likely be no wealthy benefactor, and the debtor will file for bankruptcy at some point, which mitigates losses relative to the valuation based on the going concern premise in this situation.

³⁶Some intangible assets maintain their value to a greater extent than other intangible assets. Examples of severable intangible assets that can maintain a substantial amount of their value under a liquidation premise are patents and trade names. Examples of intangible assets that will likely lose most (if not all) of their value under a liquidation scenario are workforce-in-place and amorphous goodwill.

³⁷The look-back period (i.e., time between the transfer date and the debtor's subsequent bankruptcy filing date) is ninety days for transfers made to outsiders and one year for transfers made to insiders.

³⁸The look-back period is two years under the federal bankruptcy code and often longer under state law.

³⁹*In re: Heilig-Meyers Company*, 319 B.R. 447 (Bankr. E.D. Vir. 2004), *aff'd* 328 B.R. 471 (E.D. Va. 2005).

⁴⁰*Id.*, 319 B.R. 447, 457.

⁴¹*Id.*, 328 B.R. 471, 477.

⁴²*In Re: Trans World Airlines, Incorporated*, 134 F.3d, 188, 193.

⁴³Stan Bernstein, Susan H. Seabury, and Jack F. Williams, "Squaring Bankruptcy Valuation Practice with Daubert Demands," *ABI Law Review* 16 (2008):161, 184.

⁴⁴*Id.* at 183.

A debtor does not have to be thriving in order to be a going concern. Some debtors can operate for many years with limited reinvestment in their businesses. The plaintiff's testifying expert may refer to this strategy as "milking," whereas the defendant's testifying expert may refer to it as "managing for cash." Regardless of what label is placed on this state of affairs, these debtors are clearly expected to be a going concern for a sustained period and are not on their "deathbed."

Valuation Methodologies

There are four valuation methodologies (in addition to the stock and debt approach that was addressed in the first paper of this series) that are often considered when executing the balance sheet test. Each of these four valuation methodologies is addressed in this paper.

Income approach—Discounted cash-flow method

The discounted cash flow ("DCF") method is an income-based approach that values a debtor's business by converting projections of future profitability and cash flows into their present value. The three key components of this analysis are: (a) financial projections, (b) discount rate or cost of capital assumption, and (c) terminal or residual value. Each of these components is typically contested in litigation.

The DCF method has been accepted by many courts when assessing the balance sheet test. It is common for both the plaintiff and the defendant to sponsor testifying experts that use the DCF method to arrive at business enterprise (or asset) valuations.

However, while the DCF method is consistently viewed to be a valid methodology, the output of the methodology is not always deemed to be reliable. Some may sarcastically characterize the DCF method as an outcome approach as opposed to an income approach. Support for this position was provided by Judge Easterbrook, who said the DCF method: "has been subject to criticism for its flexibility; a skilled practitioner can come up with just about any value he wants."^{45,46}

⁴⁵*To-Am Equip. Co.* 953 F. Supp., 987, 996–997 (N.D. Ill. 1997). Judge Easterbrook's characterization of the DCF method (which was used in the context of a damages calculation) was cited by the bankruptcy courts in *Iridium* and *Bachrach Clothing* in the context of the balance sheet test. *Iridium*, 373 B.R. 283, 351, and *Bachrach Clothing*, 480 B.R. 820, 866. For readers who prefer citations to finance textbooks over case precedents, Judge Easterbrook cited to Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, 3rd ed. (New York: McGraw-Hill, 1988), 62–66, 191–196.

⁴⁶Judge Easterbrook made this observation in relation to a testifying expert's DCF method valuation that was based on a forecast of massive growth in revenue and large reductions in costs. Judge Easterbrook stated "the core of [this testifying expert's] analysis was open to attack; indeed, it

Financial projections

Asset values are positively correlated with projected cash flows. All else being equal, greater (and sooner) projected cash flows result in greater values for the debtor's business enterprise (or assets) than lesser (and later) projected cash flows. Not surprisingly, the plaintiff's testifying expert will often use relatively lesser (and later) projected cash flows, whereas the defendant's testifying expert will often use relatively greater (and sooner) cash flows.

As a practical matter, the dispute over financial projections is typically straightforward. Financial projections are often created in the ordinary course. These financial projections, if reliable, often suggest that the debtor was solvent (e.g., *Vlasic* and *Iridium*) or insolvent (e.g., *ASARCO*).⁴⁷ Thus, it is not surprising that one side's testifying expert will often opine that the contemporaneous projections were reasonable, whereas the other side's testifying expert will often opine that the same projections were unreasonable. It is uncommon for there to be a "blank slate" that requires each side's testifying experts to develop their own financial projections in the first instance.

Plan to succeed bias versus result-driven hindsight bias

It is common for the plaintiff's testifying expert to opine that the contemporaneous projections were inflated. One argument that is common across many matters could be characterized as "plan to succeed" bias. Simply put, managers often have a "can do" attitude, which typically results in projections that suggest the business will succeed.

To counter this alleged "plan to succeed" bias, the plaintiff's testifying expert will develop his or her own projections. This expert will opine that his or her assumptions are more realistic than the assumptions contained within the contemporaneous projections. Two notable examples where the plaintiff's expert's arguments

strikes me as fantastic. His analysis imputes to To-Am a price-earnings ratio of 249 at the end of December 1993!...How did this come about? Although [he] projects growth of approximately 50% per year, compounded, for four years, with more modest increases thereafter, he predicts a *reduction* in To-Am's cost of doing business (other than its costs of goods sold). A business grows at a startling rate without new capital!?!?...A business quintuples its size in a few years, and repairs what it sells (repairs are a vital profit center for a forklift dealer), yet needs fewer man-hours in the service department!?! (emphasis in original)" The combination of these assumptions resulted in a forecasted net income margin that was five times greater than the industry median margin. Judge Easterbrook wondered whether any forklift dealer in the history of the United States ever achieved such a profit margin.

⁴⁷See the second paper in this series for further discussion of the court's view on the contemporaneous projections in these matters.

were found to be compelling by the court are *Tronox* (which was discussed in the second paper of this series)⁴⁸ and *In re: Yellowstone Mountain Club* (“*Yellowstone*”).⁴⁹ The court in *Yellowstone* found that the lesser projections developed by the plaintiff’s testifying expert reflected “historical reality,”⁵⁰ whereas the “over-inflated,”⁵¹ contemporaneous projections created by the debtor’s management “had no basis in historical reality and appeared to be nothing more than unsupported puffery.”⁵²

Some courts do not agree with the plaintiff’s testifying expert’s opinion that the contemporaneous projections are overinflated. These courts tend to highlight the fact that contemporaneous actors did not share the plaintiff’s testifying expert’s pessimistic outlook. These courts often characterize the plaintiff’s testifying expert’s pessimistic assumptions as (a) result driven, (b) not grounded in contemporaneous expectations, and (c) infected with hindsight bias. Two notable examples are *Vlasic* and *Iridium*. The court in *Vlasic* did not place any weight on the plaintiff’s testifying expert’s financial projections, which “fly in the face of what everyone involved in the Spin-off believed at the time.”⁵³ The court in *Iridium* found that the projection proffered by the plaintiff’s testifying experts “looks like second-guessing by financial experts who are doing precisely what they were hired to do—doing everything that needs to be done in order to justify giving an insolvency opinion.”⁵⁴

Purpose of contemporaneous projections

The purpose of the contemporaneous financial projections can have a direct bearing on a court’s assessment of the reasonableness of the underlying assumptions. Some projections may be viewed as more biased in a particular direction than other projections. For example, projections provided by a seller to potential buyers may be characterized as overly aggressive under the theory that the seller inflated the projections in order to receive an inflated offer.⁵⁵ Alternatively, projections used to set benchmarks for management bonuses may be character-

ized as overly pessimistic under the theory that management deflated the projections to set an easily met (and exceeded) target in order to generate larger bonuses for themselves.^{56,57}

Projections provided to lenders are particularly relevant for assessing the solvency of a debtor, and the potential bias can be characterized in both directions.

The defendant’s testifying expert may opine that these projections were more likely to be deflated than inflated because the debtor had to “live” with these projections. These projections were used to set covenant thresholds, and the debtor had an incentive to maintain credibility with its lenders. Simply put, the debtor had a strong incentive to underpromise and overdeliver.

The plaintiff’s testifying expert, on the other hand, may opine that these projections were inflated in order to convince the lender to advance the funds. Some may say that this argument is required when the proceeds from the loan are the source of the alleged fraudulent transfer.⁵⁸ This is so because the plaintiff’s testifying expert has to explain why the lender advanced the funds (which did not remain with the debtor) that became the debtor’s obligation to repay when the debtor was, according to this expert, insolvent.

Hockey stick versus cyclical peak

There are two types of disputes that relate to future performance relative to recent past performance. Interestingly, they move in opposite directions.

Hockey stick projections describe a drastic improvement in the future relative to recent historical performance. Sometimes, the drastic improvement is well-supported. Examples include the introduction of a new product and the return to normal operations after a distressed period. In other instances, the drastic improvement is not supported by contemporaneous expectations. A classic example is a historically stable business that projects a step function increase in profits, with no underlying support for this increase, when the preparers of the projection have an incentive to show an optimistic outlook for the business.

Cyclical peak projections describe the maintenance of future profit levels at amounts that equal, or exceed, the

⁴⁸As discussed in the second paper, the court agreed with the plaintiff’s testifying expert, who opined that the contemporaneous projections included a key assumption (the price for the debtor’s product) that was inflated relative to contemporaneous expectations.

⁴⁹*In re: Yellowstone Mountain Club, LLC*, 436 B.R. 598 (Bankr. D. Mont. 2010).

⁵⁰*Id.* at 627.

⁵¹*Id.* at 647.

⁵²*Ibid.*

⁵³*Vlasic*, 2005 WL 2234606, *29 at FN 71.

⁵⁴*Iridium*, 373 B.R. 283, 301.

⁵⁵An example is the court’s focus on “sell-side” projections in *Tronox*. See the second paper of this series.

⁵⁶An example is the court’s focus on this issue in *Vlasic*. See the second paper of this series.

⁵⁷This is a twist on the “plan to succeed” bias point, as the “plan” in this context is to “succeed” by beating the budget and obtaining a relatively large bonus.

⁵⁸There are a few exceptions (e.g., when the lender was oversecured and/or structurally senior to a substantial amount of junior claims), which were addressed in the second paper of this series.

amounts historically generated by the debtor during a cyclical peak. Sometimes, the projections are not what they appear at first glance, because the maintenance of a level of sales in nominal dollars is a *reduction* in the level of sales in constant dollars. In some other instances, the maintenance of cyclical peak projections is not supported by contemporaneous expectations.

Assessment of financial projections

Financial projections should be consistent with what was expected based on the debtor's historical performance and contemporaneous prospects for the company, its products or services, its competitive environment, and domestic/international markets. Some courts have focused on the debtor's ability to meet its projections in the past, the personal financial incentives for management to develop realistic projections, the reasonableness of underlying assumptions relative to benchmarks, the role of outside consultants, and third-party data and forecasts.

The analysis of financial projections is often dependent on factors that are specific to the debtor and the debtor's industry. Thus, a more detailed discussion is beyond the scope of this paper.

Role of fact witnesses who developed the projections

Fact witnesses can play an important role in the court's assessment of contemporaneous projections. The court in *Iridium* found that the defendant's "fact and expert witnesses...succeeded in demonstrating that a tremendous amount of thoughtful planning went into the development, review and testing of Iridium's business plan and that industry consultants and market participants, including equity investors, underwriters and senior lenders, were reasonably well informed regarding the nature of the Iridium system and its limitations."⁵⁹ Conversely, the court's criticism of contemporaneous projections in *Yellowstone* was based in part on the fact that the person who prepared the projections "offered nothing at trial to substantiate them."⁶⁰

Discount rate/cost of capital—Asset values are negatively correlated with the discount rate. Therefore, greater discount rates result in lesser enterprise values, and lesser discount rates result in greater enterprise values when the financial projections are held constant. Not surprisingly, the plaintiff's testifying expert will generally use a greater discount rate, whereas the defendant's testifying expert will generally use a lesser discount rate.

A detailed discussion on discount rates is beyond the scope of this paper. See Pratt and Grabowski's *Cost of Capital: Applications and Examples* (5th edition) for a discussion on discount rates in general. Also see Pratt and Grabowski's *The Lawyer's Guide to Cost of Capital* for a more detailed discussion on discount rates in a litigation context. The "Cost of Capital in Bankruptcy" chapter in *The Lawyer's Guide to Cost of Capital* (which is summarized in the 5th edition of *Cost of Capital: Applications and Examples*) addresses discount rates in the context of the balance sheet test.⁶¹

One discount rate-related topic is within the scope of this paper and was already discussed. This topic relates to the standard of value. A strong argument can be made to exclude the effect of financial distress under the fair market value standard of value, but not the fair value standard of value, for the previously mentioned reasons.

Residual/terminal value—The DCF method is typically composed of two valuations. The first valuation addresses the discrete period of forecasted cash flows (e.g., five years if that is the length of contemporaneous projections, and the debtor is projected to reach a steady state by that time). The second valuation addresses the period that begins after the discrete period of forecasted cash flows ends (e.g., from the beginning of year six if the discrete period is five years, and the debtor is expected to be in a steady state thereafter) and typically extends into perpetuity. The second valuation is referred to as a residual or terminal value.

Although the residual value is the third component of the business enterprise valuation, it typically draws upon the assumptions used in the first two components. Thus, the defendant's testifying expert will often arrive at a relatively high residual value by assuming a greater growth rate in projected cash flows and/or a lesser discount rate. Conversely, the plaintiff's testifying expert will often arrive at a relatively low residual value by assuming a lesser growth rate in projected cash flows and/or a greater discount rate.

It is important for practitioners to understand the effect that an unreasonable residual value can have on a solvency or insolvency determination. Two practitioners using the same projections for the discrete period (e.g., the debtor's five-year business plan) can arrive at starkly different values. This result can occur because most of the value of a business with a short (e.g., five-year) discrete projection period is contained within the residual value.

⁵⁹*Iridium*, 373 B.R. 283, 294.

⁶⁰*Yellowstone*, 436 B.R. 598, 658.

⁶¹I am the author of the "Cost of Capital in Bankruptcy" chapter in *The Lawyer's Guide to Cost of Capital* (Chicago: American Bar Association, 2014).

Market approach—Guideline company method

The guideline company method⁶² is a market-based approach that uses valuation multiples exhibited by publicly traded companies deemed sufficiently comparable to the debtor to determine the debtor's enterprise value. The two key components of this analysis are: (a) the choice of guideline companies, and (b) the parameters used in the multiple analysis (e.g., revenue, earnings, book value, or some industry-centric operating parameter like licensed beds in the acute care hospital sector). Both of these components are typically contested in litigation.

Choice of guideline companies

As a practical matter, there are two types of disputes that occur over the choice of guideline companies.

In the first type of dispute, both sides' testifying experts believe there are guideline companies that are sufficiently comparable to the debtor. Nevertheless, the testifying experts disagree over which companies to use in the valuation of the debtor. The plaintiff's testifying expert will often choose companies that trade at relatively low multiples, whereas the defendant's testifying expert will often choose companies that trade at relatively high multiples (in relation to the opposing expert's choice of multiples). Best practice is to choose the guideline companies *before* looking at the multiples to mitigate the effect, or perception, of selection bias.

In the second type of dispute, one side's testifying expert believes there are guideline companies that are sufficiently comparable to the debtor, whereas the other side's testifying expert believes there are no such companies. This dispute sometimes occurs when the valuation indication based on the multiple for most, if not all, of the potential guideline companies clearly results in the debtor passing, or failing, the balance sheet test.

Dispute #1: Choice of guideline companies

Vlasic is a good example of a dispute over the choice of guideline companies that resulted in a large range of values. The defendant's testifying expert valued the debtor's business enterprise at \$1.5 to \$1.8 billion, whereas the plaintiff's testifying expert valued the same business enterprise at \$0.6 billion (prior to the application of discounts). A large driver for the difference in value was the choice of guideline companies.

The district court found that the defendant's testifying expert's valuation was "persuasive and confirms that the stock price of VFI at the time of the Spin-off was

reasonable," whereas the plaintiff's testifying expert's valuation was "unreliable."⁶³ The district court essentially found that the plaintiff's expert's choice of guideline companies was result driven,⁶⁴ whereas the defendant's expert's choice of guideline companies was unbiased.⁶⁵

Notwithstanding the preceding discussion, some courts will place more emphasis on guideline companies chosen by the testifying expert than the contemporaneously chosen guideline companies. This result occurred in *Tronox*. The court found that the defendant's testifying expert's choice of guideline companies was "flawed" because "he admitted that he did not subject any of his choices to independent analysis."⁶⁶ The court placed more weight on the plaintiff's testifying expert who independently chose guideline companies.

It is also possible for the defendant's and plaintiff's testifying experts to agree on a set of guideline companies but disagree over which multiple from this data set to use. Should the debtor be valued in line with the lower, middle, or upper end of the range, or entirely outside the range? The answer to this question is often dependent on the facts and circumstances of the matter.

The question gets more complicated when valuing a distressed debtor. Some may argue that a distressed debtor should command a lesser valuation multiple than a nondistressed debtor. There is surface logic to the argument that a relatively weak company should command a relatively low multiple. However, that surface logic does not apply when the debtor's distress is short-term and the multiple is applied to distressed parameters. The effect of financial distress on the debtor's valuation can also depend on the standard of value (hypothetical sale versus value-in-place).

A debtor suffering from short-term distress has financial parameters that are not indicative of its expected future performance. For example, a debtor may have only generated \$1 of profit last year when it was distressed and be projected to generate \$1 billion in profits next year when it is no longer distressed. Nobody would rationally opine that this debtor is worth \$10 if the nondistressed debtors were trading around ten times last year's profits.

⁶³*Vlasic*, 2005 WL 2234606, *27 and *28.

⁶⁴The court stated that this expert "screened food companies for those with low growth and low profitability, then excluded dairy and foreign businesses. The result was a list of companies that was not comparable to VFI." *Vlasic*, 2005 WL 2234606, *27.

⁶⁵The court arrived at this view in part because the defendant's testifying expert's choice of guideline companies was generally consistent with the companies chosen by contemporaneous analysts. To the extent one company was on this expert's list but not the contemporaneous analysts' list, that company had the lowest multiple, which demonstrated a "lack of bias" in this expert's selection process. *Ibid.*

⁶⁶*Tronox*, 2013 WL 6596696, *53.

⁶²This approach is also referred to as the guideline public company method (analysis) or the comparable company method (analysis).

This debtor would likely be valued at an astronomical multiple relative to its very distressed \$1 profit level.

Nevertheless, a distressed debtor often trades at a lesser multiple than its nondistressed peers when nondistressed parameters are used. We will assume that this debtor's peers trade around eight times next year's profits. This debtor is likely worth less than \$8 billion (\$1 billion forecasted profit multiplied by the eight times industry-average multiple). This result occurs because there is often more risk in this distressed debtor reaching its forecast for next year than its peers that do not need to transition from distressed to nondistressed.

Dispute #2: Comparability of guideline companies

Idearc is a good example of a dispute over the ability to identify *any* guideline companies that are reasonably comparable to the debtor. Guideline companies were contemporaneously chosen by a firm that provided a contemporaneous solvency opinion. The plaintiff's testifying expert included a valuation based on these guideline companies that suggested the debtor was solvent. Nevertheless, the plaintiff's testifying expert determined that this debtor was insolvent.⁶⁷ The plaintiff's testifying expert arrived at her determination by assigning a small (15%) weight to her guideline company method valuation due to her opinion "that the companies were not comparable enough to warrant weighting the market multiple method more highly."⁶⁸ This is an interesting case example because the testifying expert did not completely ignore the guideline company method (as the plaintiff's testifying expert did in *Iridium*), but she effectively ignored it by placing such a low weight on this approach in her final determination.

The court found that the plaintiff's testifying expert's DCF method valuation was unreliable because it was an "extreme outlier" relative to other valuations, which included her own guideline company method valuation.⁶⁹ The court explained that:

[a]t nearly every step in the DCF analysis, [the plaintiff's testifying expert] selected inputs that forced [the debtor's] value lower. From her selection of only the most pessimistic projections of [the debtor's] future performance, to her reliance on a "commercially unreasonable" terminal value projection and calculation, to her selection of a remarkably high discount rate, the method produced a valuation that is low in the extreme and that *implied an*

incredibly low trading multiple for [the debtor] (emphasis added).⁷⁰

Some testifying experts will not show a valuation based on guideline companies and assert that there were no companies that were sufficiently comparable to the debtor.

It could be argued that a guideline company does not have to be very comparable to the debtor in order to be relevant for the debtor's valuation in the context of the balance sheet test. As a practical matter, a debtor only has to pass the balance sheet test by \$1. This observation enables practitioners to use the guideline company method even when there are no "perfect" or even "very good" guideline companies. Simply put, the definition of comparability should be somewhat relaxed for a binary analysis (e.g., the balance sheet test) relative to a more precise analysis (e.g., the identification of a specific value of the debtor).

Consider a debtor that has \$1 billion in debt. The defendant's testifying expert may opine that this debtor's business enterprise was worth \$2 billion, whereas the plaintiff's testifying expert may opine that it was worth \$500 million via the DCF method. The guideline company method can be relevant even if both parties agree that there are no guideline companies that are very comparable to this debtor.

We will assume this debtor was reasonably forecasted to generate \$200 million in EBITDA in the next fiscal year ("NFA") after the transfer date.⁷¹ We will also assume that this is the most appropriate financial parameter for valuation purposes.⁷² For benchmarking purposes, the implied EBITDA multiples are:

- 2.5× (to match the plaintiff's testifying expert's DCF method valuation),
- 5× (the amount needed to pass the balance sheet test by \$1); and
- 10× (to match the defendant's testifying expert's DCF method valuation).

The key issue is whether this debtor was worth at least \$1 billion, or five times NFY EBITDA. A testifying expert who wants to establish that this debtor fails the balance sheet test should be able to explain why this debtor's business enterprise was worth less than five

⁶⁷The plaintiff's testifying expert arrived at an \$11.7 billion to \$13.2 billion business enterprise valuation through the guideline company method. The same expert arrived at a \$5.4 billion to \$6.3 billion business enterprise valuation through the DCF method. *Idearc*, 2013 WL 230329, *3.

⁶⁸*Idearc*, 2013 WL 230329, *4.

⁶⁹*Idearc*, 2013 WL 230329, *9.

⁷⁰*Idearc*, 2013 WL 230329, *8.

⁷¹EBITDA is an acronym for earnings before interest, taxes, depreciation, and amortization. EBITDA is frequently used as a proxy for operating cash flow.

⁷²The choice of a particular financial parameter (e.g., EBITDA versus revenue) or time period (e.g., actual for the previous fiscal year versus a forecast for next fiscal year) can be the subject of debate between practitioners.

times NFY EBITDA. As a practical matter, if most potential guideline companies traded above five times NFY EBITDA, it may be difficult to credibly argue that this debtor failed the balance sheet test unless this testifying expert also explains why this debtor should be valued at such a low multiple. Conversely, it may be difficult to credibly argue that this debtor passed the balance sheet test if most potential guideline companies traded below five times NFY EBITDA, unless the testifying expert also explains why this debtor should be valued at such a high multiple.⁷³

Choice of financial parameter

The debate over financial parameters can be specific to the debtor's industry. These debates are beyond the scope of this paper.

Market approach—Guideline transaction method

The guideline transaction method⁷⁴ is another market-based approach that is similar to, but different from, the guideline company method. It is similar because it uses valuation multiples derived from transactions of companies that are reasonably comparable to the debtor to determine the debtor's enterprise value. It is different because it focuses on the sale of an entire guideline company (which occurs less frequently) as opposed to the sale of blocks of shares in guideline companies (which occurs more frequently).

This method is used in conjunction with, or in addition to, the guideline company method. It can complement the guideline company method by identifying the difference in value between a minority and controlling interest—the value of the control premium. This method also provides a different set of valuation multiples. Notably, a control adjustment most likely will not be required in these derived multiples because they likely already reflect a control premium.

It may be difficult to apply this method to some disputed transactions that closed during the most recent financial crisis for three reasons. First, there was a lack of transactions during this period relative to prior periods. Second, some of the transactions that closed during this period may have been “fire sales” and not indicative of the “fair valuation” of these companies' business enterprises. Third, many transactions that closed prior to the most recent financial crisis were likely not informative as to current values during the most

recent financial crisis due to the overall deterioration in asset values during the intervening period.

The utility of an analysis of control premiums is the subject of debate among practitioners. See the first paper of this series for further discussion.

Market approach—Reconciliation

The guideline company and guideline transaction methods are sometimes complementary. This is the case when a practitioner arrives at a minority-interest-based valuation using the guideline company method and adds a control premium that is identified in the guideline transaction method. This is also the case when a practitioner focuses on implied valuation multiples from both approaches and there is consistency among these multiples.

The guideline company and guideline transaction methods are sometimes contradictory. This is the case when a practitioner focuses on implied valuation multiples from both approaches and there is a divergence in these multiples. The practitioner should explain why the valuation multiples from one method are more reliable than the valuation multiples from the other method.

The period during the most recent financial crisis provides additional challenges. Consider the valuation of a debtor in October 2008. The guideline company and guideline transaction methods may arrive at starkly different valuations of this debtor.

The guideline company method would likely indicate substantial value deterioration for a debtor in October 2008 relative to its valuation from the previous year because the stock prices for many companies across many industries plummeted during the intervening period. A practitioner can also highlight that there are many data points for publicly traded companies because their shares are bought and sold every day. Thus, a practitioner could argue that this valuation approach is grounded in contemporaneous data. As a counter, a different practitioner may argue that the market was “dislocated” at this time, which would result in valuations that are not reliable.⁷⁵

The guideline transaction method, on the other hand, may not indicate substantial value deterioration for a particular debtor in October 2008 relative to its valuation from the previous year. There may not be many relevant data points, as transaction activity was sparse during this time period. There may also be selection bias because relatively valuable companies that command relatively

⁷³It is possible for this debtor to pass the balance sheet test at a multiple below five times if a control premium is applicable. See the first paper in this series for further discussion.

⁷⁴This approach is also referred to as the comparable M&A transaction analysis or precedent transaction method (analysis).

⁷⁵Arguments related to market dislocations are complicated. On the one hand, some may instinctively believe that the markets were not functioning properly at this time. On the other hand, it may be difficult to reconcile the deference to market values based on publicly traded stock prices for transfer dates prior to 2008 with a dismissal of market values based on publicly traded stock prices for transfer dates during 2008.

greater multiples may have been sold in a particular debtor's industry during this period.

Alternatively, the guideline transaction method may suggest greater value deterioration than the guideline company method. Some may contend that this result is due to a "fire sale" price in the guideline transactions.

Which approach is more reliable for the valuation of a debtor in October 2008? There is no simple answer that can be used to address debtors across all industries and situations. This issue was hotly contested in many avenues, with the most relevant perhaps being the rules for fair value accounting. The prevailing accounting rule at the time (SFAS 157) was updated to address these issues. SFAS 157-3 was issued on October 10, 2008, and is titled "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active." SFAS 157-4 was posted on April 9, 2009, and is titled "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly."⁷⁶

Adjusted GAAP balance sheet approach

As the name suggests, the adjusted GAAP balance sheet approach starts with a balance sheet stated in accordance with generally accepted accounting principles (GAAP) and ends with adjustments that are intended to better reflect the "fair valuation" of a debtor's assets and certain liabilities. On the surface, this approach appears to be particularly relevant for the application of the eponymous balance sheet test.

However, the adjusted GAAP balance sheet approach is not typically used by testifying experts for several reasons. First, most assets and liabilities are carried at historical cost, which is often not indicative of their "fair valuation." Second, most GAAP balance sheets do not reflect the value (current or historical) of the debtor's intangible assets. Third, the valuation of a debtor's business enterprise (which essentially is the "fair valuation" of its tangible and intangible assets) is often more reliably and efficiently identified through the other valuation approaches that were previously discussed.

Nevertheless, the adjusted GAAP balance sheet approach can be informative in certain situations.

⁷⁶Statement of Financial Accounting Standards (SFAS) 157-4 "emphasizes that even if there has been a significant decrease in the volume and level of activity for the asset or liability and regardless of the valuation technique(s) used, the objective of a fair value measurement remains the same. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions."

As discussed in more detail below, the GAAP balance sheet often contains a biased-low value (relative to their "fair valuation") for assets and certain liabilities.

Assets

Some debtors (e.g., financial institutions) report the fair value of their assets on their GAAP balance sheet or in the footnotes to their financial statements. The "fair valuation" for these debtors' tangible assets (e.g., loans) can be efficiently identified by reviewing their financial statements.

Most debtors do not report or disclose the fair value of their assets. These debtors often carry their assets at historical cost. The use of historical cost suggests that the GAAP balance sheet can be relevant for debtors that do not report the fair value of their assets too. This is so because many debtors would pass the balance sheet test when they have positive GAAP equity. Simply put, a debtor that has positive net assets on a historical cost GAAP basis is often solvent by a larger amount under a "fair valuation" basis.

The exception to the "biased-low" rule is debtors that do not record impairments despite the fact that the fair value of their assets is less than the carrying value. This result occurs due to technicalities inherent in the tests for asset impairments under GAAP accounting.⁷⁷ Practitioners should review the underlying work papers to identify when such technicalities arise.

Liabilities

The carrying value of liabilities with an unknown amount is often biased low relative to their "fair valuation." This result occurs due to the SFAS 5 standard,⁷⁸ which only requires a reserve to be recorded on the debtor's GAAP balance sheet when the liabilities are probable and reasonably estimable. The court in *Tronox* focused on this point when it stated:

financial statement reserves for environmental liabilities are of no probative value in a solvency analysis because

⁷⁷Some assets are tested for impairment under a two-pronged test, where the first test is a comparison of the sum of *undiscounted* cash flows to the carrying value of the asset. This can result in assets that have a fair valuation (i.e., based on *discounted* cash flows) less than their carrying value but are nevertheless not impaired because a discount rate is not applied in the first prong of the test. This issue is most pronounced for long-lived assets because the lack of a discount rate becomes more relevant as the duration of the asset increases.

⁷⁸SFAS 5 was replaced with Accounting Standard Codification 450 in 2009. This paper refers to SFAS 5 because it was the standard in effect for transactions that occurred prior to, or during, the most recent financial crisis.

GAAP itself only requires reporting a limited subclass of environmental and tort liabilities.⁷⁹

The effect of the bias in the carrying value of assets is often greater than the effect of the bias in the carrying value of certain liabilities. It is for this reason that most debtors that have a positive net GAAP value will pass the balance sheet test.

However, there are some instances where the effect of the bias is greater for liabilities than assets. Also, these liabilities need to be valued in order to identify the liability threshold. It is for these reasons that we will discuss how to value these liabilities.

The “fair valuation” of liabilities with unknown amounts is arrived at using the following four steps:

Step 1: Forecast the costs that the debtor will incur if the liabilities become realized at a future date. For example, a debtor may have to pay between \$1 million and \$10 million if it loses a particular lawsuit, with the range of values due to various paths that the lawsuit could take (e.g., the plaintiff may prevail on some, but not all, counts).

Step 2: Forecast the probability that the liabilities identified in step 1 will become realized at a future date. Two notable cases that addressed this issue are *Xonics* and *Covey*. The appellate court in *Covey* stated:

Xonics shows that to find the value of a contingent liability a court must determine the likelihood that the contingency will occur. To disregard the probability that the firm will not be called on to pay is to regard all firms as insolvent all of the time, for all firms face some (remote) contingencies exceeding the value of their assets. A firm’s products might prove dangerous, maiming hundreds of customers; all of an air carrier’s planes might fall out of the sky, or one of an electric utility’s nuclear stations melt down, creating stupendous liabilities; all of an insurer’s policyholders might die in the same year, generating obligations that exceeds its assets. The probability of such occurrences is low, however, and it therefore makes sense to treat the firms as solvent...

Discounting a contingent liability by the probability of its occurrence is good economics and therefore good law, for solvency, the key to § 548(a)(2), is an economic term.⁸⁰

The simplest way to conceptualize this issue is to consider a lottery ticket. Nobody would rationally opine that a \$1 ticket, prior to the drawing, is worth anywhere near the \$100 million jackpot. Everyone would agree that

this ticket is worth less than \$1.⁸¹ Similarly, the lottery sponsor would not believe that each individual lottery ticket is a \$100 million liability prior to the drawing.

Step 3: Convert the probability-adjusted payout at a future date, which is identified in step 2, into present value. This step can be more difficult than it sounds for two reasons.

First, it is not clear that a debtor’s “ability to pay” should not be reflected in the discount rate. The court in *Tronox* found that the discount rate should not take into account the debtor’s “ability to pay.”⁸² However, this holding implies a hypothetical sale standard of value that may, or may not, always be the appropriate standard of value. Interestingly, the large international accounting firms, which frequently have to address the fair market value⁸³ of these liabilities, are inconsistent. The International Financial Reporting Standards’ Interpretations Committee stated, in the context of valuing contingent liabilities:

[s]ome think the discount rate should be adjusted for credit risk, others think there is a choice whether to adjust or not, and yet others think that making the adjustment is prohibited. The large international accounting firms appear to be divided on this issue, according to the guidance in their manuals.⁸⁴

Second, it is not clear how future payments should be reduced to present value. On the one hand, it is logical to reduce future payments by the expected inflation rate. This reduction ensures an “apples to apples” comparison between the value of the liability and the value of the debtor’s business enterprise. On the other hand, it is not clear that a risky liability should be reduced to account for risk. Simply put, a debtor would presumably prefer a riskless liability over a risky liability that has the same probability-adjusted payment.⁸⁵ Thus, one could argue that the present value of the liability should be greater than the inflation-adjusted payments. This characterization is conceptually similar to an insurance policyholder

⁸¹The probability-adjusted outcome is less than \$1 because the sponsor collects more than it pays out. The expected value is less than the probability-adjusted outcome because the “investment” is not risk free.

⁸²“...[A] valuation of environmental and similar liabilities does not take into account the possibility that the debtor may not be able to pay the obligation; it attempts to arrive at a ‘fair valuation’ of the liability regardless of ability to pay.” *Tronox*, 2013 WL 6596696, *50.

⁸³Accountants use the term “fair value,” but the definition is consistent with “fair market value.”

⁸⁴International Financial Reporting Standard (IFRS) Interpretations Committee Meeting Staff Paper, 2010, *IAS 37 Provisions, Contingent Liabilities and Contingent Assets—Discount rate*, at <http://www.ifrs.org/Meetings/Documents/IFRS-IC-Nov10/1011obs10IAS37DiscountRate.pdf>, accessed May 12, 2014.

⁸⁵It stands to reason that investors are risk averse when they owe money for the same reasons that they are risk averse when they own an asset. Simply put, \$1 saved is the same as \$1 earned.

⁷⁹*Tronox*, 2013 WL 6596696, *42.

⁸⁰*Covey v. Commercial National Bank of Peoria*, 960 F. 2d 657, 659–660 (7th Cir. 1992).

that pays an insurance company more than the probability-weighted expected claim due to her risk aversion in general and her aversion to long-tail risk (i.e., very low probability of incurring a very large loss) in particular.

Step 4: Reduce the amount in step 3 to reflect the value of associated contingent assets when they exist. Consider a debt guaranty. A guarantor will incur a loss when it is required to make a payment on a debt guaranty. However, that loss can be mitigated for several reasons. One example is the existence of a coguarantor with joint (and several) liability. Another example is this debtor's ability to file a subrogation claim on the guaranteed debtor's estate in order to recover some of the funds it paid on the guaranteed debtor's behalf. It is presumably for these reasons that the court in *Paloian* found that the bankruptcy court erred when:

“it valued contingent liabilities at 100 [cents] on the dollar and contingent assets at 0 [cents] on the dollar. The treatment must be symmetrical.”⁸⁶

Synthesis of indications of value

There is often a large difference in values proffered by the testifying experts in a particular matter. This large difference presumably stems from the binary (pass/fail) nature of the balance sheet test. The plaintiff's testifying expert often opines that the debtor failed, while the defendant's testifying expert often opines that the debtor passed the balance sheet test by a substantial margin. Some practitioners have observed “the practice (both real and perceived) of courts ‘splitting the difference’ between expert opinions....”⁸⁷ This practice has been characterized as the “search and select” approach.⁸⁸ The perception that the court will use the “search and select” approach:

encourages greater divergence in opposing expert opinions. If counsel and experts believe, justifiably or not, that a court may “split the difference,” then the one party's expert may be convinced that a higher value point within the range of justifiable values may be appropriate while the opposing party's expert may be equally convinced that a lower value point should be proposed. Notice, the expert is formulating and rendering a reasonable valuation in his judgment, but is influenced by the fact that a court may split the difference. Although experts generally struggle to be as objective as possible, they are human beings who may be influenced, whether consciously or

not, by the perception that the range created by the opposing experts' valuations will impact the court's final decision.⁸⁹

To demonstrate this concept in *Vlasic*, the plaintiff's testifying expert opined that the debtor's enterprise was worth less than \$500 million, whereas the defendant's testifying expert opined that it was worth more than \$1.5 billion. The substantial difference in business enterprise value despite the fact that the testifying experts used similar valuation approaches may suggest to some that the plaintiff's and defendant's testifying experts were valuing different businesses.

Notwithstanding the general acceptance of these valuation methods, there is sometimes a “battle of approaches” within the “battle of experts.” That is, each side's testifying experts may place additional emphasis on methods that support their respective positions and/or de-emphasize methods that do not support their respective positions. For example, the plaintiff's experts in *Vlasic*, *Iridium*, and *Idearc* de-emphasized (and in essence ignored) the stock and debt approach, which suggested the debtor was solvent.

There is no approach that is “best” all of the time. However, it is preferable to use multiple approaches and methods when possible to mitigate the effect, or appearance, of result-driven bias.

A valuation case in the Delaware Court of Chancery perhaps best summarizes the benefit of using multiple valuation methods.⁹⁰ In this “battle of the experts,” the court was influenced more by the expert that used multiple valuation approaches than the expert that used only one valuation approach.⁹¹ The court found that:

[a]lthough there is no single preferred or accepted valuation methodology under Delaware law that establishes beyond question a company's value, there are commonly accepted methodologies that a prudent expert should use in coordination with one another to demonstrate the reliability of its valuation. If a discounted cash flow analysis reveals a valuation similar to a comparable companies or comparable transactions analysis, I have more confidence that both analyses are accurately valuing the company. If an expert witness clearly and persuasively explains why he or she has included or omitted an outlier from his or her data set, I have more confidence that the expert witness's data set is less likely to lead to a biased or skewed valuation.⁹²

⁸⁶*Paloian*, 619 F.3d 688, 694.

⁸⁷Stan Bernstein, Susan H. Seabury, and Jack F. Williams, “Squaring Bankruptcy Valuation Practice with Daubert Demands,” *ABI Law Review* 16 (2008):161, 198.

⁸⁸*Ibid.*

⁸⁹*Id.* at 198–199.

⁹⁰*In re: Hanover Direct, Inc. S'holders Litig.*, Nos. 1969-CC, 3047-CC, 3291-CC, 2010 WL 3959399 (Del. Ch. 2010).

⁹¹*Ibid.*

⁹²*Ibid.*

Alternatively, the best advice may be offered by Shannon Pratt. The court in *Idearc* focused on the defendant's expert's testimony that cited to "the standard treatise authored by Shannon Pratt."⁹³ According to the defendant's expert, this treatise "dictates" that when confronted with a valuation approach that produces an outlier, the practitioner "would normally disregard the outlier," "weight the outlier valuation lower than the other, more consistent valuations," or "inquire further into the model that generated the outlier in order to determine what went wrong in producing such an outlier."^{94,95}

Solvency Test #2: Adequate Capital Test

The federal bankruptcy code states that a debtor fails the adequate capital test when it:

was engaged in business or a transaction, or was about to engage in business or a transaction, for which any property remaining with the debtor was an unreasonably small capital.⁹⁶

Unfortunately, the definitions in 11 U.S.C. § 101 do not address "unreasonably small capital." Similarly, the relevant state laws do not define "unreasonably small capital" either.⁹⁷

⁹³*Idearc*, 2013 WL 230329, *8.

⁹⁴*Ibid.*

⁹⁵Shannon P. Pratt, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 5th ed. (New York: McGraw-Hill, 2007), 476–477. The testimony in *Idearc* referenced this excerpt: "The question is: What is the analyst to do regarding such an outlier value indication? There are three alternatives. First, the analyst could discard the valuation method that yields the outlier value indication. This action is based on the rationale that the outlier valuation method simply does not apply to the specific subject set of facts and circumstances. Second, the analyst could include the outlier valuation method in the valuation reconciliation but assign a very low weight to the outlier value indication. This action is based on the rationale that if the method is fundamentally sound, even a comparatively unreasonable value indication should be given some weight in the final value estimate. Third, the analyst could thoroughly investigate why the particular valuation method is producing outlier value indications. The analyst could attempt to reconcile all the value indications. The analyst could search for an answer, or at least an explanation, to this apparent anomaly. As part of this reconciliation process, the analyst should recheck all the quantitative analyses and rethink all the qualitative conclusions. The analyst may find that an error was made in the analysis and application of the outlier method. For example, this reconciliation could reveal that one or more intangible assets were inadvertently not included in the asset accumulation method. If an analytical or data error is discovered, it can be corrected. Then, the outlier method may produce a more reasonable, and more consistent, value indication. Of course, this third alternative to handling the phenomenon of an outlier value indication (which involves additional analyses and reconciliation procedures) is the preferred procedure. Only with such analyses can a discrepancy be adequately explained and reconciled with the other value indicators. If, after careful review, one of the valuation methods that appears to have merit still produces an outlier, then it becomes a matter of the analyst's professional judgment as to the extent to which the factors reflected in the valuation method actually contribute to the estimate of value of the subject business or business interest. And, the analyst will weight that outlier method accordingly in the final value estimate (emphasis added)."

⁹⁶11 U.S.C. § 548(a)(1)(B)(ii)(II).

⁹⁷Robert J. Stearn, Jr., "Proving Solvency: Defending Preference and Fraudulent Transfer Litigation," *The Business Lawyer* (2007):359, 385.

Thus, the framework for defining "unreasonably small capital" has been developed through case law.

The appellate court (Third Circuit) provided its definition of the adequate capital test in *Moody*. The court explained:

[i]n the business setting, "capital" is a term of art. As a general matter, it refers to "accumulated goods, possessions, and assets, used for the production of profits and wealth." Viewed in this light, an "unreasonably small capital" would refer to the inability to generate sufficient profits to sustain operations. Because an inability to generate enough cash flow to sustain operations must precede an inability to pay obligations as they come due, unreasonably small capital would seem to encompass financial difficulties short of equitable insolvency (emphasis added).⁹⁸

The appellate court in the Seventh Circuit (Judge Posner) in *Boyer v. Crown Stock Distribution* ("Boyer") stated:

The difference between insolvency and "unreasonably small" assets in the [leveraged buyout] context is the difference between being bankrupt on the day the [leveraged buyout] is consummated and having at that moment such meager assets that bankruptcy is a consequence both likely and foreseeable. *Focusing on the second question avoids haggling over whether at the moment of the transfer the corporation became "technically" insolvent, a question that only accountants could relish having to answer.*

But one has to be careful with a term like "unreasonably small." It is fuzzy, and in danger of being interpreted under the influence of hindsight bias. One is tempted to suppose that because a firm failed it must have been inadequately capitalized. The temptation must be resisted (emphasis added).⁹⁹

Another interesting definition was provided by the district court in *MFS/Sun Life Trust*. The district court stated:

The test is aimed at transferees that leave the transferor *technically solvent but doomed to fail*. . . While a company must be adequately capitalized, *it does not need resources sufficient "to withstand any and all setbacks"* (emphasis added).¹⁰⁰

The appellate court in *Boyer* provided more color when it stated "[e]veryone makes mistakes. That's one reason why businesses need adequate capital to have a

⁹⁸*Moody*, 971 F. 2d 1056, 1070.

⁹⁹*Boyer v. Crown Stock Distribution Inc., et al.*, 587 F.3d 787, 794 (7th Cir. 2009).

¹⁰⁰*MFS/Sun Life Trust v. Van Dusen Airport Services*, 910 F. Supp. 913, 944 (Dist. Ct. S.D.N.Y. 1995). "[T]o withstand any and all setbacks" is cited to *Credit Managers*, 629 F. Supp. at 187.

good chance of surviving in the Darwinian jungle that we call the market.”¹⁰¹ Conversely, an inadequately capitalized debtor is “naked to any financial storms that may assail it.”¹⁰² The appellate court posited that an adequately capitalized debtor should have enough “assets to have a reasonable chance of surviving indefinitely.”¹⁰³

The difference between the adequate capital and balance sheet tests is perhaps best shown through the assessment of financial institutions circa September 2008. Some practitioners have argued that many of these institutions were “technically” insolvent (i.e., assets < liabilities), whereas other practitioners have argued that these firms were “technically” solvent (i.e., assets > liabilities) at this time. This is a question that Judge Posner stated “only accountants could relish having to answer.”¹⁰⁴ As a practical matter, most practitioners would agree that many of these financial institutions were inadequately capitalized at this time, which explains the plethora of shotgun mergers and the need for Troubled Asset Relief Program (TARP) funds. Simply put, many of these financial institutions may have been “technically” solvent, but they were perceived to be insolvent (or potentially insolvent) by current and/or potential counterparties. Perception equals reality in the context of the adequate capital test.¹⁰⁵ Perhaps this phenomenon was best explained by now Federal Reserve Chairman Janet Yellen in December 2008:

[a]n accounting joke concerning the balance sheets of many financial institutions is now making the rounds, and it summarizes the situation as follows: On the left-hand side, nothing is right; and on the right-hand side, nothing is left.¹⁰⁶

¹⁰¹*Boyer*, 587 F.3d 787, 795.

¹⁰²*Ibid.*

¹⁰³*Id.* at 792.

¹⁰⁴*Id.* at 794.

¹⁰⁵The bankruptcy examiner for Lehman Brothers explained “[f]inancial institutions such as Lehman have a relatively greater risk of failure due to a lack of liquidity, as compared to a risk of failure due to the value of their liabilities exceeding the fair value of their assets.” *In re: Lehman Brothers Holdings, Inc., et al.*, 2010, <http://jenner.com/lehman/VOLUME%205.pdf>, accessed May 12, 2014, at 1643. “After the near collapse of Bear Stearns, Lehman recognized that its ability to obtain [short-term secured] financing was more dependent on *the market’s confidence in Lehman’s viability* than the actual value of the underlying asset being financed (emphasis added).” *Id.* at 1646.

¹⁰⁶Meeting of the Federal Open Market Committee, December 15–16, 2008, <http://www.federalreserve.gov/monetarypolicy/files/FOMC20081216meeting.pdf>, accessed May 12, 2014.

How much capital is “adequate” or not “unreasonably small”?

There is no bright-line test that can be designed to answer this question, which is presumably why the appellate court in *Boyer* characterized this test as “fuzzy.” In theory, there should be a “line in the sand” that suggests a debtor had too much debt and/or not enough assets. However, there is often disagreement among practitioners over how much debt a debtor can reasonably be expected to carry. This is clearly demonstrated by the wide range of debt levels that is often exhibited by debtors within the same industry (e.g., some publicly traded debtors target an AA credit rating, whereas other debtors target a B credit rating in a leveraged buyout). Similarly, there is often a disagreement over how many assets a debtor should maintain. This is clearly demonstrated by the fact that some companies maintain more cash than they could possibly invest at returns above their cost of capital, while other companies purposely have virtually no cash but maintain access to credit lines.

It is presumably for this reason that the courts focus on a principle-based test. The appellate court in *Moody* provided useful guidance when it stated:

The Credit Managers Ass’n analysis appears to strike a proper balance. It holds participants in leveraged buyout responsible under § 5 of the UFGA when it is reasonably foreseeable that an acquisition will fail, but at the same time takes into account that “businesses fail for all sorts of reasons, and that fraudulent [conveyance] laws are not a panacea for all such failures.” *Therefore, we hold the test for unreasonably small capital is reasonable foreseeability.* Under this analysis, it was proper for the district court to consider availability of credit in determining whether [the debtor] was left with an unreasonably small capital. *The critical question is whether the parties’ projections were reasonable.*

Because projections tend to be optimistic, their reasonableness must be tested by an objective standard anchored in the company’s actual performance. Among the relevant data are cash flow, net sales, gross profit margins, and net profits and losses. However, reliance on historical data alone is not enough. *To a degree, parties must also account for difficulties that are likely to arise*, including interest rate fluctuations and general economic downturns, *and otherwise incorporate some margin for error* (emphasis added).¹⁰⁷

As shown in the preceding excerpt, the appellate court in *Moody* developed a two-part analysis for the adequate capital test. First, the parties must assess the debtor’s

¹⁰⁷*Moody*, 971 F.2d, 1056, 1073.

ability to sustain its operations under “reasonable” projections of its future performance. Second, the parties must overlay downside scenarios “[t]o a degree.”

Moody framework part one: Assessment of reasonable projections

An assessment of the reasonableness of projections is a fact-based inquiry that is dependent on the circumstances of a particular case. However, there are two common themes that cut across several cases.

First, the contemporaneous financial projections, when taken at face value, are often easy to interpret. Simply put, these projections either suggest that the debtor was expected to remain a viable business for the foreseeable future (e.g., *Vlasic* and *Idearc*) or they do not (e.g., *ASARCO* and *TOUSA*). There may be a “battle of the experts” at trial, but the outcome seems to be preordained most of the time when the contemporaneous financial projections are taken at face value.

Second, it is common for a testifying expert (typically the plaintiff’s expert) to opine that the contemporaneous projections should not be taken at face value because they were not reasonable. See the preceding discussion in the balance sheet test section re: the assessment of contemporaneous projections. This is an area where there can be a legitimate “battle of the experts.” As a practical matter, courts have considered contemporaneous market assessments (e.g., *Vlasic*, *Iridium*, *Idearc*, and *TOUSA*) to help adjudicate this dispute.¹⁰⁸

Moody framework part two: Overlay of downside scenarios

It is noteworthy that the appellate court in *Moody* did not define the extent of the “degree” of downside that should be factored into the analysis. This is not surprising because it would be difficult to establish a one-size-fits-all standard.

As a practical matter, it would not be surprising if the plaintiff’s testifying expert overlays a relatively large “degree” of downside, while the defendant’s testifying expert overlays a relatively small “degree” of downside. However, in my experience, the opposite occurs quite frequently.

This outcome appears to be due to testifying experts’ desire to not be perceived as biased in their determinations, regardless of whether or not their analysis is in fact biased. Thus, the plaintiff’s testifying expert will often arrive at an inadequate capital determination with a relatively small (or zero) overlay of downside scenarios.

¹⁰⁸See the first two papers of this series for further discussion.

Conversely, the defendant’s testifying expert will often arrive at an adequate capital determination even after overlaying a relatively large downside scenario (i.e., show how hard it is to “break the model.”)

The appellate court in *Boyer* provided interesting color when it referred to “financial storms.” Perhaps the “degree” of downside used by testifying experts should be consistent with prudent planning around physical storms. Some physical storms are expected to occur frequently, while larger physical storms are expected to occur less frequently. Perhaps the “financial storm” context should be viewed in this light. The test could be set at “storm of the half decade” or “storm of the decade” levels, with the goal being to match the duration of the debtor’s debt obligations.¹⁰⁹ Perhaps the best measurement is the length of the look-back period that is subject to fraudulent conveyance lawsuits.¹¹⁰

The preceding discussion regarding “financial storms” should be based on expectations as of the transfer date. Consider a debtor that makes a transfer in 2006 and files for bankruptcy in 2009. The intervening period is only three years. However, it may be incorrect to argue that this debtor was unable to weather the “storm of the half decade.” Many practitioners consider the most recent financial crisis to be the worst since the Great Depression, which is presumably why it is often referred to as the “Great Recession.” The Great Recession occurred more than half a century after the Great Depression. One can quibble over whether the Great Recession was the “storm of the half century” or “storm of the century.” However, there is no credible argument that can be made to suggest that the Great Recession was a lesser “storm of the half decade.” Furthermore, most practitioners would agree

¹⁰⁹Some debtors have debt obligations with relatively short maturities (e.g., a few years), while other debtors have some debt obligations with relatively long maturities (e.g., decades). This result is often the artifact of strategic decisions made by the debtor’s management. Some debtors choose to pay lesser interest rates over a shorter duration and are willing to take the risk that interest rates will increase in the future when the relatively short-term obligations mature and need to be refinanced. Other debtors choose to pay greater interest rates over a longer term to mitigate the risk that interest rates will increase in the future. A standard that focused only on the length of the debt maturities for a particular debtor would be *arbitrary* and *counterintuitively* result in a more difficult test to pass for the debtor that *reduced* its financial (i.e., refinancing) risk in this example.

¹¹⁰This would be a practical standard because it assesses the risk that there would be a subsequent fraudulent conveyance lawsuit. Consider a debtor subject to state laws that have a four-year look-back period. This debtor could file for bankruptcy on the first day in year five after the transfer date, and a fraudulent conveyance lawsuit would be time-barred. This standard would result in different tests for different states because some states have longer look-back periods than other states. State laws are often invoked by plaintiffs because the look-back period under federal law is only two years. While this proposed practical standard may appear haphazard on the surface, the fact remains that different states have different look-back periods. A one-size-fits-all approach could result in the financial test not fitting the law for transfers subject to certain state laws.

that contemporaneous market participants did not foresee the depths of what would become the Great Recession when most transactions were entered into, and transfers were made, prior to the second half of 2007.¹¹¹

The preceding discussion is not meant to establish that every debtor that filed for bankruptcy during, or after, the Great Recession can pin the blame for its failure on the “storm of the half century” or “storm of the century.” Some debtors would have failed if an average storm had occurred. Other debtors may have failed due to debtor-specific problems even if there was nothing but blue skies for the broader market. The analysis should be debtor-specific and overlay the expectations as of the transfer date for the appropriate type of financial storm.

Relevance of the debtor's business plan

The amount of capital that a debtor should have access to on the transfer date in order to be found “adequate” should be correlated with the debtor's business plan. Growth-oriented business plans may require a substantial amount of capital in order to fund the planned growth of the business. This capital could be currently in the debtor's possession or be reasonably expected to be obtained from the capital markets at a subsequent date. Conversely, more mature business plans may require little or even no capital, as expected operating cash flows are typically positive, and expected investment requirements can be minimal.

The type of capital should be also correlated with the riskiness of the debtor's business plan. Some business plans require a substantial amount of equity capital and have little capacity to support fixed-cost debt obligations (e.g., volatile start-up companies). Other business plans require a small amount of equity and have significant debt capacity (e.g., conservative financial institutions).

Various standards within the “Goldilocks zone”

The adequate capital test could be analogized to “Goldilocks and the Three Bears.” A debtor must have access to a certain amount of capital in order to be deemed adequately capitalized for obvious reasons. However, a debtor does not need access to an infinite amount of capital. As previously discussed, the district court in *MFS/Sun Life Trust* stated that a debtor does not need resources sufficient “to withstand any and all setbacks.” Simply put, it would be inefficient for a debtor

to have too much capital. A debtor that has more capital than it reasonably needs generates lower economic profits for its owners and less output for the overall economy than if the excess capital were deployed more efficiently elsewhere. Thus, an adequately capitalized debtor needs to have access to an amount of capital that is “just right.”

One might consider the “gold standard” within the “Goldilocks zone” (i.e., most likely to have too much, not too little) to be a self-financing business plan. A self-financing business plan uses cash generated from operations or asset sales to fund future growth and extinguish all of its liabilities. This business plan is not dependent on the ability to access the capital markets in the future. It should be impossible for a plaintiff to establish that a self-financing business plan anchored in reasonable assumptions was inadequately capitalized.

One might consider the “silver standard” to be a self-financing business plan that reasonably depends on the perpetual maintenance of a particular perception of the debtor's creditworthiness. Many financial institutions, which have to roll over massive amounts of debt on a frequent basis, would fall into this standard. During the Great Recession, there were a number of firms that were arguably adequately capitalized up until the point when they quickly became inadequately capitalized. These firms may be self-financing in the sense that they do not need incremental capital in order to remain a going concern. However, these firms are dependent on their ability to frequently roll over existing debt obligations in the capital markets, which can become fickle. This was the case for companies like Lehman Brothers (“Lehman”), which had to roll over short-term secured financing that supported assets that became increasingly long-term as market conditions worsened.

One might consider the “bronze standard” to be a business plan that requires growth to remain a viable going concern and requires future access to the capital markets to finance this growth that is reasonably expected to be available. There are many debtors that should be deemed to have reasonable access to capital with this type of business plan.

Debtors that do not have enough capital should share similar characteristics. They will likely have a limited amount of flexibility with their balance sheets and poor prospects for the generation of positive net operating (operating less investing) cash flows in the future. Some of these debtors may be highly levered, while others may have a modest amount of leverage but nevertheless have no reasonable expectation of refinancing their debts at maturity and ultimately repaying them at some point in the future.

¹¹¹The recession that became known as the Great Recession began in December 2007. Recessions are identified after the fact so it is a fair debate as to whether contemporaneous market participants were aware that they were in a recession during December 2007. Furthermore, transaction activity was robust through the first half of 2007, which is inconsistent with a view that contemporaneous market participants saw a massive financial storm brewing over the horizon at that time. The first credit crisis is generally believed to have begun in August 2007.

Solvency cushion

The size of a debtor's solvency cushion is another way to address the "How much capital is enough" question. The size of the solvency cushion refers to the amount (expressed in dollar and/or percentage terms) that the debtor's assets exceed its liabilities. Thus, the solvency cushion is an analysis that is derived from the balance sheet test. Implicit in the solvency cushion analysis is a belief that a debtor needs to pass the balance sheet test by more than just \$1, to "incorporate some margin for error," in order to be deemed adequately capitalized.

The size of a solvency cushion that is deemed "adequate" should vary based on the facts and circumstances for a particular debtor.

Some debtors may need a small solvency cushion in order to be deemed adequately capitalized. An extreme example can help demonstrate this point. Consider a debtor that owns only one asset, a long position in a zero coupon US government bond, and has only one liability, a short position in the same zero coupon US government bond. This debtor, which admittedly is unlikely to exist in the real world, may not even need one penny of solvency cushion to have adequate capital. This is so because the debtor's only asset is risk-free, its assets and liabilities are duration-matched, there is no reinvestment risk, and there is no need for cash to finance debt service prior to the debt's maturity.

The debtor in the preceding example may not exist in the real world, but many financial institutions are conceptually similar to this debtor. A financial institution that is levered on a 10:1 debt/equity basis has a solvency cushion of only 9% when enterprise value is used as a proxy for asset value.¹¹² A solvency cushion of 9% may be too low for debtors in most industries, but it may be acceptable for certain financial institutions.

Other debtors may require a substantial solvency cushion in order to be deemed adequately capitalized. Classic examples are debtors with very volatile business plans and/or large amounts of fixed costs that require cash outlays. A subset of these debtors may also have no unencumbered assets that can be monetized to help weather subsequent financial storms. Thus, the capital available to these debtors, in order to provide a "margin for error," may be small (or nil).

Most debtors are somewhere between these two extremes. For context, the average leveraged buyout transaction in the years leading up to the Great Recession had capital structures that consisted of approximately 60% to 70% debt (per data published in Standard &

¹¹²Computed as $\$1/(\$10 + \$1) = 9.09\%$.

Poor's *Leveraged Commentary and Data*). Said differently, these buyouts generally had equity/solvency cushions of 30% to 40%.

As a practical matter, an inadequately capitalized debtor is "highly likely (emphasis added)"¹¹³ to subsequently file for bankruptcy. Courts have not defined the probability that results in a "high," "likely," or "highly likely" probability of filing for bankruptcy. Credit ratings may provide a useful benchmark. While a credit rating for an individual debtor may have been incorrect for a number of reasons, the credit ratings for the entire rated universe provide context for default rates within various categories. Standard & Poor's reported in its *2012 Default Study* that the five-year average default rate was approximately 10% for BB-rated debtors and approximately 20% for B-rated debtors.¹¹⁴ Many leveraged buyouts target, and receive, a B credit rating. It appears fair to conclude that the average leveraged buyout that receives a B credit rating, which only has a one-out-of-five chance of subsequently defaulting over the next five years, is not "highly likely" or even "likely" to subsequently file for bankruptcy during the look-back period for fraudulent transfer lawsuits.¹¹⁵

Notwithstanding the preceding discussion, practitioners should be careful when using averages because they do not provide insight into the dispersion of data within the sample. The debt capacity for debtors can range from very low to very high. The debtors in some leveraged buyouts have a greater amount of debt capacity than the debtors in other leveraged buyouts. Moreover, a focus on leveraged buyouts is strongly influenced by selection bias. The debtors subject to leveraged buyouts were deemed by contemporaneous market participants to have ample debt capacity, which may make them poor benchmarks for assessing the required size of the solvency cushion for a debtor that does not have ample debt capacity.

Bankruptcy versus out-of-court restructuring versus bailouts

Notwithstanding the preceding discussion re: solvency cushion, one could argue that some debtors that failed the balance sheet test, or passed the balance sheet test with an insufficient solvency cushion, had adequate capital. This

¹¹³*Boyer*, 587 F.3d 787, 793.

¹¹⁴Standard & Poor's RatingsDirect, *Default, Transition, and Recovery: 2012 Annual Global Corporate Default Study and Rating Transitions*, p. 8.

¹¹⁵The one-out-of-five ratio understates the probability during down cycles and overstates the probability during up cycles, due to the rating agencies' tendency to rate "through the cycle." Nevertheless, the ratio would have to more than double before B-rated companies, on average, would be more likely than not to default within the next five years.

counterintuitive argument is based on the fact that not all financially distressed debtors file for bankruptcy.

Creditors of a distressed debtor often have a choice: Work with the debtor to enable an out-of-court restructuring, or do not work with the debtor, which will often lead to the debtor's bankruptcy filing. A classic example is a lender that "amends and extends" a debtor's loan. Some practitioners have sarcastically referred to this practice as "extend and pretend" or "delay and pray."¹¹⁶ Judge Posner in *Boyer* explained:

A firm might be insolvent in the bankruptcy sense of negative net worth—its liabilities exceeded its assets, yet it might continue operating as long as it was able to raise enough money to pay its debts as they became due, or even longer if its creditors were forbearing...

An inadequately capitalized company may be able to stagger along for quite some time, concealing its parlous state or persuading creditors to avoid forcing it into a bankruptcy proceeding in which perhaps only the lawyers will do well.¹¹⁷

Judge Posner made the preceding statement in part to explain why a debtor, who was found to be inadequately capitalized, was able to stave off bankruptcy for three and a half years after the transfer date. As a practical matter, a court would not be asked to assess a debtor's capital adequacy if it staved off bankruptcy for a long enough period after the transfer date. The look-back period in *Boyer* was four years, which means a fraudulent transfer lawsuit would have been time-barred if the debtor staved off bankruptcy for just six more months. Thus, one could argue that the adequate capital test should consist of two parts. First, assess whether the

debtor was adequately capitalized or not. Second, if the debtor is found to be inadequately capitalized, assess its ability to stave off bankruptcy until after the look-back period expires.

This observation has practical ramifications because most debtors, by design or not, have debt that matures after the look-back period expires. For example, it is common for a debtor in a state with a look-back period of four years to finance a transfer with debt that matures more than four years in the future. Thus, the largest debts often do not have to be repaid or refinanced during the look-back period.

An interesting wrinkle to this issue is the adage "misery loves company." Holding everything else constant, lenders are more likely to be forbearing when the debtor's peers are suffering from similar problems. For example, lenders were more likely to be forbearing in late 2008 and early 2009 when the capital markets in general, and debtor-in-possession financing markets in particular, were "frozen" than they were during normal times. Perhaps the best evidence of this phenomenon is the fact that corporate default rates during the so-called Great Recession were no worse than they were during the so-called mild recession of 2001.¹¹⁸

The bailout of financial institutions during the Great Recession raises an interesting question: Can "too big to fail" debtors fail the adequate capital test? On the one hand, the need for a bailout is often direct evidence of inadequate capital.¹¹⁹ On the other hand, the whole point of the bailout is to restore the debtor's capital to (near) adequate levels, which implies that the debtor's capital levels are adequate after taking into consideration the effects of the bailout. Interestingly, a court will never have to answer this question in the context of a fraudulent conveyance lawsuit because the debtor has to file for bankruptcy (i.e., "fail") before a court can get a chance to arrive at a determination.¹²⁰

Some practitioners will dismiss this discussion as academic. Simply put, a debtor that is subject to a fraudulent conveyance lawsuit, by definition, filed for bankruptcy. Thus, this debtor was clearly not "too big to fail," and its creditors were ultimately not forbearing enough to keep it out of bankruptcy. However, the

¹¹⁶For example, see Carrick Mollenkamp and Lingling Wei, "To Fix Sour Property Deals, Lenders 'Extend and Pretend,'" *The Wall Street Journal*, July 7, 2010. The WSJ reported "[s]ome banks have a special technique for dealing with business borrowers who can't repay loans coming due: Give them more time, hoping things improve and they can repay later. Banks call it a wise strategy. Skeptics call it 'extend and pretend'...It also has helped preserve banks' capital, by keeping some dicey loans classified as 'performing' and thus minimizing the amount of cash banks must set aside in reserves for future losses." Also see Steve Pearlstein, "'Delay and Pray Won't Work for Commercial Real Estate,'" *The Washington Post*, October 1, 2010. Lenders' "preference has been to extend loans when they come due, often on more favorable terms, in the hope that prices will rebound. In the industry, this is only half-jokingly referred to as 'extend, amend, and pretend.' The lenders' patience derives not from any sympathy for borrowers but from a cold calculation of self-interest. They understand that if they foreclose on a large number of properties and put them on the market, the increased supply will push down prices even further. Under mark-to-market accounting rules, that would require them to write down the value of all the other non-performing loans still on their balance sheets. Up to now, regulators have been willing to turn a blind eye to bank balance sheets that do not fully reflect the likely loan losses and decline in loan values."

¹¹⁷*Boyer*, 587 F.3d. 787, 794–795.

¹¹⁸Standard & Poor's RatingsDirect, *Default, Transition, and Recovery: 2012 Annual Global Corporate Default Study and Rating Transitions*, p. 5.

¹¹⁹The modification ("often") is included to acknowledge that some institutions that received TARP funds may have correctly argued that they did not need these funds to remain viable.

¹²⁰Courts may be asked to address this question in other contexts. For example, a court was asked to assess AIG's solvency during the period of its bailout in a contract dispute with Brookfield Asset Management, Inc. That case settled. Jeff Sistrunk, "Brookfield to Pay \$905M to Resolve AIG Credit Swap Dispute," *Law 360*, August 23, 2013.

adequate capital test is forward-looking, not backward-looking. Thus, this is not an academic point.

Parallels can be drawn with the quantification of contingent liabilities. As previously discussed, the court in *Paloian* found that contingent liabilities can be mitigated by contingent assets (e.g., the obligation to make a payment on a debt guaranty can be mitigated by rights of contribution and/or subrogation claims). Following this logic, one could argue that creditors might be forbearing in the downside scenarios that are contemplated in the adequate capital test. This is an interesting concept because the probability that those creditors will be forbearing likely increases when the stress reflected in the downside scenarios increases due to macrolevel reasons.

What are the sources of capital?

Debtors typically have access to many different sources of capital. Each of these sources of capital should be analyzed when assessing a debtor's capital as of the transfer date.

Some cases have focused on working capital, which refers to current assets (which includes cash) less current liabilities. Generally speaking, more working capital is viewed to be better than less working capital. This observation has some surface logic, but it should only go so far. Simply put, most going concerns require working capital to run their businesses. Thus, the relative amount of working capital (i.e., excess or insufficient amount relative to the normal needs of the debtor's business) is more relevant than the actual amount of working capital.

The relative amount of working capital is relevant but can be misleading. For example, a debtor that collects its receivables and/or turns its inventory over faster than its peers may, counterintuitively, appear to have insufficient working capital. However, the lesser amount of working capital in this example is a sign of the debtor's viability, not a liability. Simply put, a firm that manages its working capital well can finance growth more efficiently than a firm that does not. Another example is a debtor that rationally chooses to maintain availability under a committed revolver as opposed to drawing down the revolver and incurring related expenses.¹²¹

Practitioners should also understand the typical working capital requirements in the debtor's industry.¹²²

¹²¹In this example, the debtor pays less for access to the cash under the committed revolver than it would have to pay if it actually drew down the revolver. This principle holds for cash from owners too when opportunity costs are taken into account.

¹²²Other practitioners also observe that the test should be grounded in the debtor's industry. One practitioner observed that "[t]he test for unreasonably small capital is flexible and may depend on the industry or business at issue." This practitioner cites the following from *Collier*: "Adequate capitalization is... a variable concept according to which specific industry of business is involved. The nature of the enterprise, normal turnover of inventory rate, method of payment by customers, etc., from the standpoint

Some industries inherently have relatively low or even negative working capital requirements. For example, many electricity producers have negative working capital requirements because they don't have any inventory (electricity cannot be economically stored), and their payables exceed their receivables. As a result, negative working capital is "good" because creditors help fund the debtor's operations. Negative working capital in this instance is a net positive because it means no cash is required (and in fact cash is received) to fund the debtor's working capital requirements when it grows its business.

Some debtors have more flexibility with the composition of their assets than others. For example, a manufacturer with integrated plants may not have much flexibility to monetize individual plants. That is, the sale of a single plant could impair the debtor's ability to manage its operations. Conversely, a diversified company may have substantial flexibility to raise cash when needed through the sale of some operations or a collection of assets without adversely affecting its business plan. A real-estate developer is a good example because it can often monetize one development without having any adverse effects on its other developments.

Notwithstanding the preceding discussion, there is an important difference between (a) monetizing assets to raise needed cash to fund short-term liquidity needs and (b) cannibalizing a debtor's business, which enables a debtor to stave off bankruptcy in the short-term. The former is viable strategy that is employed by countless debtors. The latter, as several courts (e.g., *ASARCO*, *Yellowstone*, and *Tronox*) have highlighted, is not a viable long-term strategy. Simply put, a long-term strategy of cannibalization essentially converts a going concern premise of value into an orderly liquidation premise of value.

Some debtors may be limited in their ability to raise additional cash through debt at the parent level but may be able to raise additional cash through debt at a subsidiary or project level. Other debtors may be able to raise capital through the formation of joint ventures. The ability to raise capital from these sources should be considered.

Relevance of the debtor's management

The debtor's management team should be very relevant when considering the adequate capital test. They are paid to do their best to manage the debtor's business through

of what is normal and customary for other similar businesses in the industry, are all relevant factors in determining whether the amount of capital was unreasonably small at the time of, or immediately after, the transfer." Robert J. Stearn, Jr., "Proving Solvency: Defending Preference and Fraudulent Transfer Litigation," *The Business Lawyer* (2007):359, 388.

expected and unexpected twists and turns after the transfer date. Simply put, they are not, or at least should not be, “potted plants.”

Practitioners should take into consideration the debtor’s management’s ability to make midcourse corrections if there becomes a subsequent need to diverge from the business plan that was in effect on the transfer date. These midcourse corrections could entail the prudent reduction or delay in capital expenditures.¹²³ Other midcourse corrections could be the sale of certain assets or other restructuring activities. The business plan that was in effect on the transfer date is often not the only path that results in a viable business plan for the debtor after the transfer date.

This is not to say that practitioners should assume away all potential problems on the transfer date. The most able management team could not keep certain debtors afloat. The analysis should take into account the debtor’s management’s ability, or lack thereof, to take corrective actions that can preserve the debtor’s viability.

Expectations for refinancing the debt upon maturity

An analysis of capital adequacy sometimes boils down to one question: Was the debtor reasonably expected to have the ability to refinance or repay its debt upon maturity? This is an important question because many debtors are reasonably forecasted to make all of their scheduled interest payments, especially when interest rates and credit spreads are relatively low. A subset of these debtors may also have covenant-free or covenant-light loans that do not provide a mechanism for creditors to potentially call the loan. The debt maturity date could be the first instance when the debtor may be forecasted to test its ability to access the capital markets.

The analysis must be based on expectations as of the transfer date. Practitioners must forecast the debtor’s financial condition on the debt maturity date using information available as of the transfer date.

I have seen the plaintiff’s testifying expert in several cases focus on the lack of a specific repayment or refinancing plan on the transfer date to further arguments that the debtor was inadequately capitalized on the transfer date. The debtor entered into the loan(s) that financed the alleged fraudulent transfers in all of these cases. Thus, the plaintiff’s testifying expert argued in these matters that the debtor should have had a specific

repayment or refinancing plan on the day the loan(s) were funded.

We will first address a specific repayment plan from the personal finance perspective to provide some context. Consider a person who buys a house when he or she is thirty-five years old. This person likely put a relatively small amount down (e.g., 20%) and financed the remainder with a traditional thirty-year mortgage. This mortgage amortizes over the life of the loan and is completely paid off when this person reaches retirement age. This is a classic example of a debt repayment plan during the duration of a loan. This is presumably the “gold standard” from the plaintiff’s perspective in the previously mentioned cases.

Perhaps nothing demonstrates the going concern premise better, or reminds one of his or her own mortality, than the typical corporate loan. Unlike an individual, a business can theoretically have an infinite life. Some businesses have sustained themselves in one form or another for over a century.¹²⁴

However, other businesses may have a relatively short life. Many small businesses fail within their first year of operations. Thus, some businesses are decidedly mortal, notwithstanding the going concern premise.

How do borrowers and lenders address this wide range of potential life spans for the debtor? They enter into relatively short-term debt agreements (as compared to the thirty-year mortgage) with the expectation that the debt will likely be refinanced at maturity. This addresses both ends of the expected life spectrum for corporations. A healthy debtor can refinance its debt and continue its existence. A sickly debtor, on the other hand, may be unable to extend its life through a refinancing.¹²⁵

Lenders are aware of the risk that the borrower may be unable to repay or refinance the loan upon maturity. This is referred to as credit risk and explains why the interest rate charged to corporate borrowers is greater than the risk-free rate. This credit spread is the lender’s compensation for taking the calculated risk that the borrower may be unable to fulfill its obligation.

A strong argument could be made that a specific repayment or refinancing plan on the day the loan is funded is not required in order for the debtor to be deemed adequately capitalized. The “plan” should be implicit in the reasonable forecast for the debtor’s business. A debtor that is reasonably forecasted to be

¹²³Another practitioner echoed this view when he stated: “The analysis is not necessarily static, as companies can adjust their expenditures to address revenue shortfalls and/or diminished access to capital.” Robert J. Stearn, Jr., “Proving Solvency: Defending Preference and Fraudulent Transfer Litigation,” *The Business Lawyer* (2007):359, 389.

¹²⁴Examples include Standard Oil, JP Morgan, and AT&T.

¹²⁵Sickly in this context is an absolute term. Consider a debtor that is rated AA at origination that subsequently becomes a BB-rated debtor (i.e., the best credit rating within the below-investment-grade, or “junk,” classification) upon debt maturity. This debtor has a minor cold that is nowhere near terminal.

viable should be expected to refinance its debt upon maturity. Conversely, a debtor that is reasonably forecasted to be unviable may not be able to refinance its debt upon maturity.¹²⁶

An issue that is related to the lack of a specific repayment or refinancing plan is a lack of required principal amortization or a bond sinking fund. Some plaintiff's testifying experts have argued that the lack of principal amortization or a bond sinking fund is evidence that the debtor did not have adequate capital. A strong argument can be made, to the contrary, that this is often evidence that the debtor was deemed to be viable by its lender(s).

To address this issue, we must consider why lenders sometimes require principal amortization or a bond sinking fund. The most likely reason is heightened concern that the debtor will be unable to refinance or repay its debt upon maturity. Thus, the lack of such a contractual requirement often suggests that there was, in fact, no heightened concern that the debtor would be unable to refinance or repay its debt upon maturity. Moreover, the lack of such contractual requirements affords the debtor additional flexibility (because it preserves the debtor's cash) to finance its business during the duration of the loan.

Unprecedented volatility during the most recent financial crisis

The amount of required capital should be correlated with the outlook for the market in which the debtor operates. That is, a debtor should require less capital on hand when markets are relatively stable and more capital on hand when markets are relatively volatile. As shown in Figure 1, the S&P 500 volatility index, which is often termed a "fear index," was relatively low between 2005 and early 2007 but increased to all-time highs during the most recent financial crisis. Some may argue that the relatively high volatility required debtors to have more capital on hand in 2008 or 2009 than prior periods in order to be deemed adequately capitalized. Conversely, some may argue that the relatively low volatility during the period leading up to the most recent financial crisis required debtors to have less capital on hand than prior periods to be deemed adequately capitalized.

Regulatory ratios

Some industries (e.g., banking) are subject to regulation designed to monitor and preserve the capital adequacy of the regulated companies. On the surface,

¹²⁶The exception is the "amend and extend" phenomenon that was previously discussed.

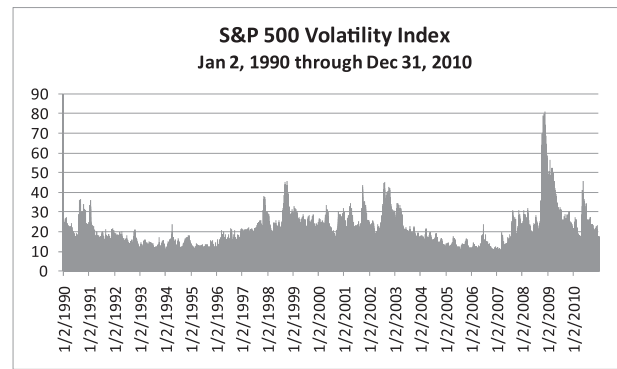


Figure 1
Fear Index

any regulated debtor with favorable regulatory ratios appears to be adequately capitalized. However, this may not always be the case. Thus, these regulatory metrics should not be the sole basis for a capital adequacy analysis.

Inconsistencies between regulatory ratios and market data are sometimes pronounced and can cast doubt on the reliability of regulatory ratios, market data, or both. For example, consider the difference between Lehman's accounting-based net leverage ratio¹²⁷ and market-based credit default swap (CDS) spreads¹²⁸ on Lehman's debt obligations in the months preceding its bankruptcy filing. Lehman's net leverage ratio suggested its capitalization was historically strong through the day of Lehman's bankruptcy filing.¹²⁹ However, CDS spreads on Lehman's debt at the same time showed market participants believed Lehman's capitalization was historically weak in the days leading up to Lehman's bankruptcy filing.¹³⁰ See Figure 2. Given these facts, it would not be surprising if defendants focused on the net leverage ratio while plaintiffs focused on the CDS spreads in their analyses for the adequate capital test if they had to assess Lehman during the period that immediately preceded Lehman's bankruptcy filing. The court-appointed Lehman bankruptcy examiner considered both sets of facts.

It may be possible to use a third data point to assess which of these metrics is more reliable for assessing

¹²⁷This ratio measures debt relative to assets. Although this ratio is accounting-based, many of Lehman's assets were marked-to-market due to fair value accounting requirements.

¹²⁸The spread is the amount an investor pays to insure against the debtor's subsequent default.

¹²⁹Lehman's historically low net leverage ratio suggested that Lehman had less debt, and more equity, relative to its assets in the months preceding its bankruptcy filing than it did during fiscal years 2000 through 2007.

¹³⁰Lehman's historically high CDS spreads indicate that market participants believed the probability of a default on Lehman's debt and/or the amount of the loss-given-default on Lehman's debt was significantly greater in 2008 than it was during previous years.

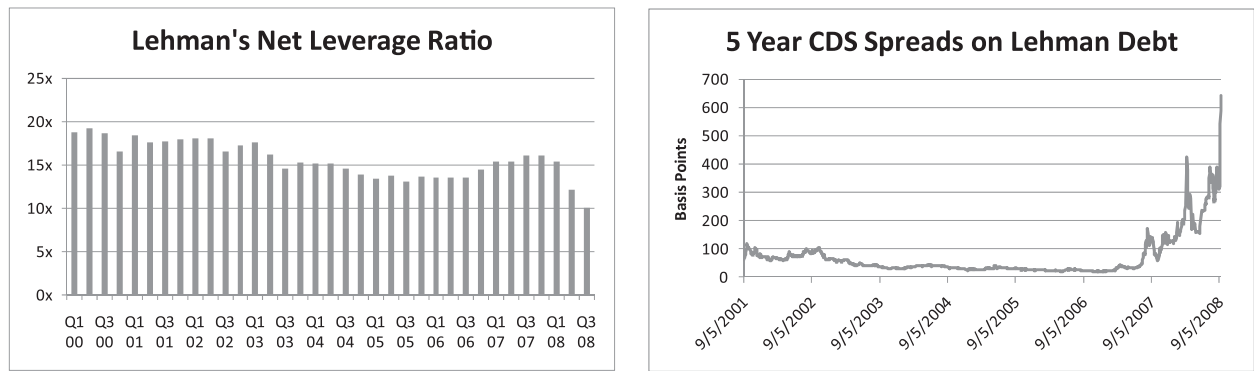


Figure 2
Lehman's Net Leverage vs. CDS Spreads

Lehman's capital adequacy (or lack thereof) circa the summer of 2008. Lehman failed liquidity stress tests conducted by the Federal Reserve in May and June 2008 that assumed it would suffer a "light" version of the run on the bank that caused Bear Stearns' near collapse in March 2008.¹³¹ This failed stress test may be the bridge between the relatively strong regulatory ratios (there was no bank run at the time) and relatively weak CDS spreads (there was an increasing probability of a bank run). If a finder of fact determined that the potential for a bank run was meaningful, the CDS spreads would presumably be a more reliable indicator. Conversely, if a finder of fact determined that the probability of a bank run was de minimus, the historically high CDS spreads could potentially be viewed as a market dislocation.¹³²

Hindsight

Hindsight refers to information that is discovered after the fact, and its use in retrospective solvency analyses is controversial. Information learned after the transfer date includes the debtor's subsequent bankruptcy filing and changes in the debtor's prospects that may have led to its bankruptcy filing.

A strong argument can be made that hindsight should play no role in solvency analyses for fraudulent transfer and preference lawsuits. Simply put, this information was not available to contemporaneous market participants. Thus, it is unfair to use information learned in hindsight to assess decisions made by contemporaneous market participants that did not have this information. As

previously discussed, courts have found analyses grounded in hindsight bias to not be credible, and the appellate court in *Boyer* specifically cautioned against the temptation to use hindsight in the test of a debtor's capital adequacy as of the transfer date.

A more colorful argument for not using hindsight was made by an attorney I once worked with on a solvency-related matter. This attorney proffered that a focus on what caused the debtor to file for bankruptcy is analogous to an autopsy. The mortician knows the patient died, and it is his or her job to figure out the cause of death. Sometimes the cause of death is easy to identify, and sometimes there is a confluence of factors. Bringing this analogy back to fraudulent conveyance lawsuits, the "death" is the debtor's bankruptcy filing, and a contributing cause of death is often too much debt and/or insufficient revenue.¹³³

This attorney proffered that the appropriate test should be a person's checkup prior to his or her death, which is analogous to assessing the financial condition of the debtor on the transfer date. Some patients may get a clean bill of health at the doctor's office yet nevertheless subsequently die prematurely due to unforeseen reasons. The doctor is not guilty of malpractice in this instance. By extension, a debtor is not insolvent if it was deemed to be adequately capitalized on the transfer date but subsequently files for bankruptcy due to reasons that were not reasonably foreseeable on the transfer date.

The difference between an autopsy and a checkup is large. In the former, the practitioner knows the person died and is likely to assign a strong correlation between the final outcome (death) and the factors identified in the

¹³¹Report of Anton R. Valukas, bankruptcy examiner, *In re: Lehman Brothers Holdings, Inc., et al.*, 2010, <http://jenner.com/lehman/VOL-UME%205.pdf>, accessed May 12, 2014, at1680-1681 (March 11, 2010).

¹³²Please note that this is a simplified illustrative example to highlight a concept. Any analysis of Lehman's capital adequacy (or lack thereof) is further complicated by the need to analyze the effect of issues such as repo 105 and other topics addressed by the court-appointed examiner.

¹³³Many debtors do not subsequently file for bankruptcy because they had too much debt on the transfer date. However, most debtors that do file for bankruptcy had a sizable amount of debt. The positive correlation between debt levels and subsequent defaults is why a sizable amount of debt can be a contributing cause, but not "the" cause, of the debtor's bankruptcy filing.

exam. In the latter, the practitioner does not know the patient's ultimate fate and is more likely to dismiss certain conditions. For example, high blood pressure may be found to be a chronic condition that can be reasonably managed (analogous to a sizable, but manageable, debt load) in a checkup but deemed to be the primary driver of the subsequent death during the autopsy.

Notwithstanding the preceding discussion, "experts and courts alike use hindsight all the time."¹³⁴ It is not uncommon for parties in litigation to disagree over the role hindsight should play in solvency analyses. It is also not uncommon for both parties in litigation to use hindsight with the argument boiling down to "my hindsight-driven analysis is more compelling than your hindsight-driven analysis."

Some practitioners have argued that the use of hindsight "gives plaintiffs an advantage that the law does not permit."¹³⁵ The authors of a paper that addresses hindsight bias (and advocates for the use of contemporaneous market data) state:

[j]udges are legally required to evaluate the financial condition of the debtor at the time of the allegedly fraudulent transfer without the use of hindsight. "Hindsight bias" is a term used by psychologists and behavioral economists to describe the widely observed human tendency to overestimate, after the fact, the foreseeability of events that have occurred. Hindsight bias can lead evaluators who have the benefit of present knowledge to believe that past decision makers were negligent or reckless. Empirical research conclusively demonstrates the existence of hindsight bias. As of 2003, hindsight bias was demonstrated in over 150 published papers, many of which reported multiple empirical studies. Many of these studies specifically focus on determinations of legal liability in contexts analogous to fraudulent transfer litigation.¹³⁶

"Hindsight bias" can be observed in our daily and professional lives. There are many Monday morning quarterbacks who believe the coach's call was acceptable when made but subsequently question the coach's call after the play turned out to be unsuccessful. Some practitioners look back at the period preceding the most recent financial crisis and think, "How did they not know the market was about to crash?" However, most of these practitioners did not "put their money *then* where their mouth is *today*" by taking positions (e.g., short the stock of companies with large subprime mortgage

portfolios) to profit from this supposed contemporaneous knowledge.

Hindsight tends to be used inconsistently by the courts. The authors of one paper state:

Foreseeability is determined on case-by-case basis, but such an ad hoc approach to justice provides little guidance to counterparties structuring transactions. In many cases, courts have reached seemingly inconsistent determinations about whether a particular type of business setback is foreseeable. Low-cost competition is apparently foreseeable in the automotive industry, but not in mobile communications industry. Loss of revenue is apparently foreseeable if it is due to the loss of a key customer, but not if it is due to the loss of a key employee. Financial crises are apparently not foreseeable if they are due to defaults by poor former communist countries, but they are foreseeable if they are due to defaults by poor subprime mortgage borrowers. The failure to achieve post-merger synergies may or may not be foreseeable, but the manner in which the judiciary will resolve these matters certainly is not.¹³⁷

There may be areas where the consistent use of hindsight can be useful. Some practitioners argue that hindsight may confirm what was known or knowable when a transfer was made in certain situations. For example, consider a debtor that concealed important facts about its prospects from contemporaneous market participants as of the transfer date. In this example, an analysis of market participants' reaction to the subsequent disclosure of this concealed information may support a pro forma analysis of a debtor as if this information was actually known. This is essentially what the court did in *Vlasic*. *Vlasic* is an example where the defendant's hindsight-driven analysis was more compelling than the plaintiff's hindsight-driven analysis.¹³⁸

Hindsight: Period between the transfer and subsequent bankruptcy filing

In litigation, interpretation of the adequate capital test has the potential to be influenced by the length of the period between the transfer date and the debtor's subsequent bankruptcy filing date for two reasons. First, the test requires a debtor to have a "reasonable chance of surviving indefinitely."¹³⁹ Second, we know the debtor did not "survive indefinitely" because it subsequently filed for bankruptcy within the look-back period. Thus, plaintiffs typically have an incentive to incorporate this explicit use

¹³⁴Stan Bernstein, Susan H. Seabury, and Jack F. Williams, "Squaring Bankruptcy Valuation Practice with Daubert Demands," *ABI Law Review* 16 (2008):161, 185.

¹³⁵Michael Simkovic and Benjamin S. Kaminetzky, "Leveraged Buyout Bankruptcies, the Problem of Hindsight Bias, and the Credit Default Swap Solution," *Columbia Business Law Review* (2011):118, 151.

¹³⁶*Id.* at 151–152.

¹³⁷*Id.* at 145–146.

¹³⁸This observation is ironic given the fact that many practitioners view the court's opinion in *Vlasic* as "don't use hindsight." The view held by many practitioners is true, to an extent.

¹³⁹*Boyer*, 587 F.3d 787, 792.

of hindsight (i.e., the debtor's subsequent bankruptcy filing) into their analyses. Under this theory, any analysis that suggests the debtor was adequately capitalized as of the transfer date was ultimately "proven" to be wrong.

Interestingly, the focus on the length of the period between the transfer date and the debtor's subsequent bankruptcy filing date has not been limited to plaintiffs. Some defendants have argued that a "long enough period" is "proof" that the debtor was adequately capitalized when the transfer was made. Under this theory, a debtor that was inadequately capitalized when the transfer was made would not have been able to remain outside of bankruptcy for such a sustained period of time. Thus, under this theory, the relatively long period outside of bankruptcy "proves" the debtor was adequately capitalized when the transfer was made.

The appellate court in *Boyer* provided a mixed view on this subject. The appellate court stated:

Not that the length of the interval between the LBO and the collapse is irrelevant to determining the effect of the transfer. It is pertinent evidence. The longer the interval, the less likely that the collapse was fated at the formation of the new company, although we are skeptical of cases that can be read to suggest that ten or twelve months is a long enough interval to create a presumption that the terms of the LBO were not responsible for the company's failure.¹⁴⁰

An informal survey of rulings in various matters shows there is no "standard" length of time between the transfer date and subsequent bankruptcy filing date that suggests adequate or inadequate capital as of the transfer date. Some courts have found the debtor to be inadequately capitalized when it remained outside of bankruptcy for two or more years after the transfer date.¹⁴¹ Conversely, the plaintiff did not prevail in other cases when the debtor filed for bankruptcy less than one year after the transfer date.¹⁴²

There are several reasons why an adequately capitalized debtor may nevertheless file for bankruptcy less than one year after the transfer date. One case (*American Classic Voyages*) had a material unforeseeable negative event (the terrorist attacks of 9/11) decimate its business model, which was dependent on discretionary air travel.¹⁴³ Some may argue that this is the exception that proves the rule re: inadequately capitalized firms file for

bankruptcy less than a year after the transfer date. However, as shown in Figures 1 and 2, overall market conditions can change rapidly, which suggests a debtor can *quickly* transition from adequately to inadequately capitalized. Alternatively, a business plan (such as the debtor's plan in *Iridium*) may turn out to be "terribly wrong" in hindsight yet be reasonable when made.

There are also many reasons why an inadequately capitalized debtor can nevertheless stave off bankruptcy for several years. As previously mentioned, the court in *Boyer* found that "[an] inadequately capitalized company may be able to stagger along for quite some time, concealing its parlous state or persuading creditors to avoid forcing it into a bankruptcy proceeding in which perhaps only the lawyers will do well."¹⁴⁴ The court in *ASARCO* found that the debtor was only able to stave off bankruptcy for over two years by using "drastic measures" such as monetizing all available assets and managing for short-term cash flow at the expense of long-term viability.¹⁴⁵ Some otherwise inadequately capitalized debtors staved off bankruptcy during the most recent financial crisis due to government (direct and/or indirect) intervention.

Hindsight: Practical applications

Vlasic provides a good example where the limited use of hindsight can have an important and practical role. Hindsight played two roles in the court's decision. First, it provided information discovery. Recall that the plaintiff argued in *Vlasic* that certain information was not disclosed to contemporaneous market participants. Second, it identified a "line in the sand" for retrojection arguments. Retrojection in a litigation context refers to the backwards projection of an event. In the context of solvency analyses, a plaintiff may try to use retrojection arguments to infer that the debtor's subsequent bankruptcy filing was known or knowable as of the transfer date. Both of these roles are discussed next.

The court used hindsight in part to resolve a dispute between the parties in *Vlasic* regarding the quality of information that was disclosed to contemporaneous investors. The debtor's market capitalization (greater than \$1 billion, which implies a solvency cushion of >67%¹⁴⁶ as of the transfer date), if reliable, likely indicated that the debtor was adequately capitalized. The plaintiff argued that the market was not fully informed of the debtor's operational problems, and, by extension, that the debtor's market capitalization was irrelevant.

¹⁴⁰*Id.* at 795.

¹⁴¹See *Boyer*, 587 F.3d 787, 795; *ASARCO*, 396 B.R. 278, 399; and *Yellowstone*, 436 B.R. 598, 660.

¹⁴²See *Iridium*, 373 B.R. 283, 352–353, and *In re: American Classic Voyages Co.*, 367 B.R. 500, 516 (Bankr. Del. 2007).

¹⁴³*American Classic Voyages*, 367 B.R. 500, 512.

¹⁴⁴*Boyer*, 587 F.3d 787, 795.

¹⁴⁵*ASARCO*, 396 B.R. 278, 399.

¹⁴⁶The debtor had \$500 million in debt. Thus, the debtor had a 67% solvency cushion with a \$1 billion market capitalization, which is computed as follows: \$1 billion/(\$1 billion plus \$500 million).

The court observed that:

the value the market placed on [the debtor] is of the utmost importance, but the legitimacy of that value necessarily depends on what information the market had when the shares in question were being traded.¹⁴⁷

The court found that the market did not have complete disclosure as of the transfer date. However, the court also found that the market obtained complete disclosure shortly after the transfer date. Thus, the court reasoned that the debtor's market data as of the dates when the information was subsequently disclosed were relevant for assessing the debtor's solvency as of the transfer date. This information indicated that the debtor was solvent. Notably, the debtor's publicly traded stock outperformed the market for similar publicly traded companies during this time period. This observation is important, because it suggests that the debtor's relative valuation was sustained notwithstanding the disclosure of negative information.

Some practitioners (typically plaintiffs) use retrojection arguments that work backwards from the debtor's bankruptcy filing. Instead of (or in addition to) projecting financial and operational performance forward from the transfer date, proponents for retrojection arguments work backwards from the debtor's bankruptcy filing date. Retrojection proponents typically argue that there were no significant events (e.g., a 9/11-type event) between the transfer date and the debtor's bankruptcy filing date to support the proposition that the debtor's subsequent bankruptcy filing was not foreseeable. The terrorist attack on 9/11 was clearly a unique event, so it is probably an unfair standard to use in this context. Practitioners should also consider that many debtors subsequently fail for a variety of known and unknown reasons, and the lack of a 9/11-type event does not mean that the subsequent bankruptcy filing was inevitable.

The debtor in *Vlasic* sold a substantial amount (\$200 million) of subordinated, unsecured bonds approximately fifteen months after the transfer. The court found that investors who purchased these bonds had "full disclosure" of all relevant facts.¹⁴⁸ The court also found that the debtor "had a deservedly weaker credit rating as of the bond offering than it had at the [transfer date]."¹⁴⁹ Thus, the debtor's capital adequacy was established fifteen months after the transfer date in a market transaction at a time when the debtor was clearly less valuable and creditworthy than it was as of the transfer

date. The sale of bonds in this case is a good example of a "line in the sand" in which retrojection arguments (i.e., the subsequent bankruptcy filing) cannot cross.

Another practical application of hindsight may be the assessment of the debtor's ability to weather financial storms after the transfer date. Many debtors filed for bankruptcy after Lehman's bankruptcy filing. Several of these debtors will be caught up in fraudulent transfer and preference lawsuits stemming from transfers made well before the financial crisis began. These debtors were able to survive an escalating financial storm as things went from bad (the summer credit crisis of 2007) to worse (Bear Stearns' near collapse in March 2008) to catastrophic (Lehman's collapse in September 2008). It may be reasonable to conclude that these debtors had adequate capital as of the pre-summer 2007 transfer dates to weather many types of storms, but they ultimately failed due to the fifty-year or hundred-year storm, which should be beyond the reasonable scope for the definition of "adequate."

Solvency Test #3: Ability to Pay Debts Test

The ability to pay debts test appears to be the least defined of the three tests.¹⁵⁰ Many cases that focus beyond the balance sheet test emphasize the adequate capital test more than the ability to pay debts test. To provide context, the court in *ASARCO* could not find any commentary on this test from the highest courts in the relevant states for that matter, so it cited to cases from across the country. The court in *ASARCO* concluded that the ability to pay debts test differed from the adequate capital test in part by the fact that the ability to pay debts test had an objective and subjective prong, and the test is satisfied if either prong is satisfied.¹⁵¹

The subjective prong appears to focus on actual intent. The court in *ASARCO* found that "[t]he subjective prong is met if it can be shown that 'the debtor made the transfer or incurred an obligation contemporaneous with an intent or belief that subsequent creditors likely would not be paid as their claims matured.'"¹⁵² The court found that the

¹⁵⁰One practitioner observes that this financial test "rarely is litigated because of the subjective nature of the inquiry." This same practitioner observes that "[t]he distinction between the ability to pay debts test and the unreasonably small capital test is not entirely clear, although the latter appears to be a more difficult test. Indeed, a company that passes the adequate capital test likely will pass the ability to pay debts test as a matter of course." Robert J. Steam, Jr., "Proving Solvency: Defending Preference and Fraudulent Transfer Litigation," *The Business Lawyer* (2007):359, 391, 393. As will be discussed later herein, this test appears to have an actual intent component within the constructive fraud tests. With this perspective, it is not surprising that one of the few cases to address this financial test was a case where the court found that the debtor failed the actual intent provision.

¹⁵¹*ASARCO*, 396 B.R. 278, 399.

¹⁵²*Ibid.*

¹⁴⁷*Vlasic*, 2005 WL 2234606, *11.

¹⁴⁸*Id.* at *15.

¹⁴⁹*Id.* at *16.

plaintiff met its burden of proof. The court focused on the various debts that were not being paid as they came due on the transfer date. The court found that “[t]he strongest evidence of [the debtor’s] belief that it was unable to pay its debts is that there were extensive ‘hold lists’ during the relevant time.”¹⁵³

The objective prong appears to focus on constructive analyses. The court found that “[t]he objective prong measures whether [the debtor], as a going concern, would reasonably have been able to pay its debts after making the challenged transfer.”¹⁵⁴ The court found that the plaintiff met its burden of proof. Some of the support was based on the reasoning in the subjective prong. Additional support for the court’s conclusion included (a) a going concern qualification issued by the debtor’s auditor, (b) the debtor’s negative working capital position,¹⁵⁵ and (c) cash-flow projections that predicted liquidity problems.¹⁵⁶ These analyses appear to be of the same ilk as the analyses that are performed for the adequate capital test.

This objective prong of the ability to pay debts test could be viewed as conceptually similar to a credit rating because a credit rating assesses the probability of default. Analyses supporting conclusions under this test assess the debtor’s ability to service (e.g., make required mandatory principal and interest payments) and repay or refinance its obligations upon maturity. This analysis typically considers both base case and reasonably foreseeable downside case operating scenarios.

There is no bright-line credit rating that denotes the passing or failing of this test. Many financial firms require an investment-grade credit rating (e.g., BBB– or higher from Standard & Poor’s) to execute their business plans. However, most nonfinancial firms do not require an investment-grade credit rating and operate successfully with below-investment-grade credit ratings, which are often referred to as “speculative grade” or “junk.” In fact, the average nonfinancial firm is rated below investment grade.¹⁵⁷

¹⁵³*Id.* at 400.

¹⁵⁴*Ibid.*

¹⁵⁵This is one of the examples previously discussed where courts have focused on the lack of, or negative, working capital to be a negative factor. As discussed above, the lack of, or negative, working capital should be considered in the context of the debtor’s industry. Nothing in the court’s opinion in *ASARCO* suggests that it was normal for debtors in this particular industry to have negative working capital.

¹⁵⁶*Id.* at 401.

¹⁵⁷Standard & Poor’s *Global Ratings Distribution: Investment-Grade Ratings Predominate in the Financial Sector while the Majority of Nonfinancial Companies Are Rated Speculative Grade* (July 14, 2011).

The ability to comply with financial covenants is often analyzed when applying this test. A financial covenant violation can cause the debtor to default on its obligation. However, debtors frequently have the ability to cure a financial covenant default through negotiations with their lenders. Therefore, the degree and expected sustainability of the financial covenant violation are relevant. A debtor with a minor or temporary financial covenant violation is generally not at a high risk of default, while a major sustained financial covenant violation can be the ultimate cause of a debtor’s bankruptcy filing.

Predictions

It is undeniable that investors incurred significant losses during the most recent financial crisis. However, the ultimate allocation of these losses is unclear and will not be known until fraudulent transfer and preference lawsuits work their way through the courts. Many of these cases will turn on the robustness and reliability of the financial analyses performed contemporaneously with the transaction and ex post by the adverse parties’ financial experts.

There is no crystal ball that can be consulted to predict the outcome of these lawsuits. However, there are some trends that appear to be developing that may affect how these cases are litigated. First, it is difficult for plaintiffs to summarily dismiss contemporaneous indicia of solvency without providing grounded reasons for why these indicators are unreliable. Therefore, plaintiffs are more likely to explicitly address these indicators going forward. Second, the adequate capital test appears to be taking on a more prominent role. There may be arguments over the implementation of this test due to the market dislocations and lack of liquidity that occurred during the most recent financial crisis. Third, some debtors filed for bankruptcy because of unusual problems that occurred during the most recent financial crisis, while others would have filed for bankruptcy even if the recession had been less pronounced. Therefore, there may be a dispute over the ultimate cause of the debtor’s bankruptcy filing and the related foreseeability of this outcome as of the transfer date.

It does not require a crystal ball to predict that fraudulent transfer and preference lawsuits will be hotly contested due to the large sums at stake and interesting valuation and credit issues. Therefore, it is in the best interests of both plaintiffs and defendants to be knowledgeable of the reasoning outlined in prior court decisions and new challenges presented by the periods

preceding, contemporaneous with, and succeeding the most recent financial crisis.

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