Business Valuations in the Context of Insolvency

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Presentation Agenda

- Use of Valuation Experts in Bankruptcy
- Valuations in the Context of Solvency Analyses
- Business Valuation Basics
- Case Study – What to look for in a Solvency Valuation Analysis
The Use of a Valuation Expert in Bankruptcy

• Typical situations when the assistance of a valuation expert is utilized:
  ▪ Adequate Protection
  ▪ Claims Determination
  ▪ Asset Recovery
  ▪ Plain Confirmation
  ▪ Liquidation Analysis
  ▪ Avoidance Actions

What is a Solvency Analysis?

• Performing a fair valuation of a business to determine whether /when a business is/became insolvent
• For entities other than partnerships and municipalities, the Bankruptcy Code defines insolvent 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, exclusive of (i) property transferred, concealed, or removed with intent to hinder, delay, or defraud such entity’s creditors; and (ii) property that may be exempted from property of the estate under section 522 of [the Bankruptcy Code].
What is a Solvency Analysis?

• Under Sections 547 and 548 of the Bankruptcy Code an alleged preferential transfer may be avoided if the transfer was “made while the debtor was insolvent”. An alleged fraudulent transfer may be avoided if, the debtor was “insolvent on the date that such transfer was made or such obligations was incurred, or became insolvent as a result of such transfer or obligation.”

3 Types of Solvency Analyses

1. **Balance Sheet Test** (11 U.S.C. § 548 (a)(1)(B)(ii)(I)) – Whether the fair value of the company’s assets exceed its liabilities as of the valuation date(s);

2. **Cash Flow Test** (11 U.S.C. § 548 (a)(1)(B)(ii)(III)) – Whether the company had adequate cash flows as of the valuation date(s) to pay its debts as they mature;

3. **Capital Adequacy Test** (11 U.S.C. § 548 (a)(1)(B)(ii)(II)) – Whether the company had adequate capital as of the valuation date(s)
Basics of Solvency Analyses

- Used to determine cut-off dates for fraudulent conveyances

  - **Intentional fraudulent conveyances** – Transactions may be avoided if the debtor made a transfer or incurred an obligation with intent to hinder, delay, or defraud

  - **Constructive fraudulent conveyances** – Transactions may be avoided if the debtor received less than "reasonably equivalent value", and:
    - Was insolvent on the date that such transfer or obligations was made;
    - Became insolvent as a result of such transfer or obligation;
    - Was engaged in business or transaction, or was about to engage in business or transaction that would leave the company with unreasonably small capital;
    - Intended to incur, or believed that the debtor would incur, debts that would be beyond the debtor’s ability to pay as those debts mature

The Balance Sheet Test

- A test of whether the fair value of the firm’s assets exceed the face value of the it’s liabilities

- Can be performed on either a going-concern or liquidation basis

- The value of the firm’s assets is equivalent to its Enterprise Value

- Enterprise value can be determined using standard valuation approaches and methodology
The Balance Sheet Test

- Step 1: Consider the highest and best use of the debtor corporation assets. This indicates the premise of value.
- Step 2: Estimate the fair value of the debtor corporation assets (including financial assets, real estate and tangible property and intangible assets).
- Step 3: Determine the amount of the debtor corporation liabilities (including current and long term liabilities and contingent liabilities)
- Step 4: Subtract the amount of the total liabilities from the fair value of the total assets.

NOTE: The balance sheet test is “passed” if the fair value of the assets EXCEEDS the total liabilities

The Cash Flow Test

- A test of whether a firm can reasonably be expected to pay its debts as they become due
- Can a firm match its cash sources to it’s maturing obligations
- Firm must be able to meet future obligations in addition to current obligations
- Sometimes referred to as the ability-pay solvency test or equitable solvency test
The Capital-Adequacy Test

• A test of whether a firm has adequate capital to pay
  ▪ Operating expenses
  ▪ Debt (principal and interest)
  ▪ Contingent obligations
  ▪ Capital expenditures

• Short term test where financial projections are essential to evaluating capital adequacy

• The objective is to determine the likelihood that the firm will endure potential business fluctuations over several quarters following the transfer date.

Dates of Solvency Analyses

• Valuations are commonly done at end-of-period dates, to coincide with financial statement date.

• Problem: “The relevant solvency valuation date for avoidance purposes is the date of the challenged transfer.”
  ▪ (See, e.g., In re WRT Energy Corp., 282 B.R. at 368) ; see also In re R.M.L., Inc., 92 F.3d at 154 (“For purposes of § 548, solvency is measured at the time the debtor transferred value, not at some later or earlier time.”)

• Therefore, multiple valuations may need to be done for a period prior to the challenged transfer, and for a period subsequent to the challenged transfer.

• Additionally, the valuation analyst must consider events that occurred in between the valuation dates.
Business Valuation Basics

Standards of Value

- Fair Market Value
- Fair Valuation
- Fair Value
- Investment Value
- Intrinsic Value
Level of Value

• Levels of Value
  • Synergistic/Strategic Control
  • Control
  • Non-controlling, Marketable
  • Non-controlling, Non-marketable

• Discount for Lack of Control
  • Due to the power to direct management or policies of the business enterprise.

• Discount for Lack of Marketability
  • Due to the ability to quickly convert property to cash at minimal time and cost.

Premise of Value

• The concept of valuing a subject in the manner in which it would generate the greatest return to the owner of the property, taking into account what is physically possible, financially feasible, and legal.

  • Going-Concern Value

  • Liquidation Value
Valuation Approaches & Methods

• Market Approach
• Income Approach
• Asset-Based (Cost) Approach

Market Approach

• The market approach determines value by analyzing similar public and private companies and completed transactions and applying value measures to the subject company.
  
  ▪ Guideline public and private company method
  ▪ Comparable transaction method
  ▪ Internal transaction method
**Income Approach**

- Direct Equity Method
  - Valuations of minority interests
  - Valuations where only the value of equity is required

- Invested Capital Method
  - Valuations when there are multiple investment holders (common stock, preferred stock and debt)
  - Weighted Average Cost of Capital is used

**Asset-Based (Cost) Approach**

- Most useful when companies have the following characteristics:
  - The company has substantial tangible assets
  - The company is in the early stages of its life
  - The future viability of the company is doubtful
  - The company is a small business in an industry with low financial and regulatory barriers
Case Example

What to Look For in a Solvency Valuation Analysis

Valuation Issues to Consider

Actual Case Example

• Premise of Value Issues
• Fair Market Value and What Does It Mean?
• Use of Hindsight
• Beware the Working Capital Adjustment
• Consideration of Contingent Liabilities
• Valuation Dates versus Transfer Dates
• Valuation Reality Checks – Take a Step Back/Consideration of Results
Case Background

- Privately-owned Central Appalachian Coal Company
- June 2009 Involuntary Petition by Creditors (Chapter 7 Bankruptcy)
- July 2009 Converted to Chapter 11 Bankruptcy
- Plan approved December 2011
- December 2011 - Trustee of Liquidating Creditor Trust Appointed

Liquidating Trustee Sought To:

- Avoid and recover fraudulent transfers
- Recover damages from corporate waste, breach of fiduciary duties and unjust enrichment
- Recover damages from alleged legal malpractice (against Company’s attorneys)
Solvency Opinions

• October 2014 Liquidating Trustee produces expert report
• Analyzes Company’s solvency as of December 31, 2016, 2007 and 2008
• Concludes Company insolvent at each date and at all times in between those dates

OUR ROLE:
• Analyze, and as appropriate, critique analysis and conclusions of the Liquidating Trustee’s expert.

Liquidating Trustee’s Expert

• Premise of Value- Going Concern Value
  (Assuming Company will continue to operate with existing management, capital structure and contractual obligations)
• Standard of Value - Fair Market Value
• Approach - Income approach using a discounted cash flow method
• Assumes complete mining of Company’s 116 million tons of existing coal reserves
• Expert prepares his DCF forecast, based on his own assumptions
• Concludes that company was insolvent at all times
Premise of Value Issues

• Going Concern vs. Liquidation Value
• Often easier to argue balance sheet insolvency if using a liquidation premise
• Events and circumstances dictate
  ▪ Dates of alleged fraudulent transfers
  ▪ Period of time until bankruptcy
  ▪ Triggering events
• Issue: Is premise of value consistent with analysis?

Premise of Value Consistency

Do 15 years of projected negative cash flows support a going concern premise of value?

![Projected Net Cash Flow Chart]

December 31, 2006
Fair Market Value

“The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms length in an open and unrestricted market, which neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.”

- Valuing a controlling interest
- Control owners can change / improve operating results
- Performed through “Normalization of Earnings”
  - Nonrecurring costs
  - Discretionary costs
  - Growth rates
  - Management compensation
- In this case – inconsistent with the pleadings (corporate waste and inter-company transfers)

Use of Hindsight

The desire to use hindsight in valuing the subject company is strong, particularly because we know in reality that the company ultimately became insolvent.


When evaluating the debtor’s financial condition at the time of transfer, the court should look “at the circumstances as they appeared to the debtor and determine whether the debtor’s belief that a future event would occur was reasonable. The less reasonable a debtor’s belief, the more a court is justified in reducing the assets (or raising liabilities) to reflect the debtor’s true financial condition at the time of the alleged transfer.”
Use of Hindsight

Courts have stated that use of hindsight is generally not permissible:

In re WRT Energy Corp., 282 B.R. at 407 (“Solvency valuations, including those undertaken by experts, generally must be based on conditions and standards as they existed at the time of the transaction at issue, not on hindsight”)

However, consideration of information originating prior to valuation date is permissible:

In re Adelphia Communications Corp., 512 B.R. 447, 495 (Bankr. S.D.N.Y 2014) (“Though courts must determine solvency free of impermissible hindsight, courts may consider information ‘originating subsequent to the transfer date if it tends to shed light on a fair and accurate assessment of the asset or liability as of the pertinent date’ which assures that the valuation is based in reality”); In re Coated Sales, Inc., 144 B.R. 663, 668 (Bankr. S.D.N.Y. 1992) (“Court may consider information ‘originating subsequent to the transfer date if it tends to shed light on a fair and accurate assessment of the asset or liability as of the pertinent date (transfer date).’”), citing, In re Chemical Separations Corp., 38 B.R. 890, 895 (Bankr. E.D. Tenn. 1984).

Use of Hindsight

Faulty Conclusions based on Improper Use of Hindsight:

<table>
<thead>
<tr>
<th>Observation</th>
<th>(Faulty) Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Company missed its projections.</td>
<td>The contemporaneously-prepared projections were overly optimistic, and need to be adjusted downward for valuation purposes.</td>
</tr>
<tr>
<td>The Company was involved in litigation that commenced after the Valuation Date.</td>
<td>The Company had contingent liabilities as of the Valuation Date.</td>
</tr>
<tr>
<td>The Company went bankrupt subsequent to the Valuation Date.</td>
<td>The Company was not a going concern as of the Valuation Date.</td>
</tr>
</tbody>
</table>
Use of Hindsight to Recast Production Forecasts

Opposing Expert Adjustments to Production Forecasts by Year as of December 31, 2006

Beware the Working Capital Adjustment!

• Companies generate cash flow (after expenses)
• Cash flow may be used for three purposes:
  ▪ Repayment of Debt
  ▪ Distribution to Equity Holders (Creating Value)
  ▪ Build Working Capital
• Easiest way to kill value – build working capital
• Especially a concern with struggling companies
**Working Capital Adjustment Used to Reduce Equity Value**

![Projected change in working capital December 31, 2006](image)

**Contingent Liabilities**

- Was the contingent liability “known or knowable” as of the valuation date?
- It is inappropriate to apply perfect hindsight when estimating contingent liabilities.
- Have risks been considered in the calculation of the discount rate? If so, you maybe have considered them when forecasting results to a discounted present value.
Contingent Liability Assumptions are Critical

- Quantified likelihood of losses from coal supply agreement lawsuits
- Based on proofs of claims filed
- Estimated likelihood of loss was inconsistent with Trustee’s efforts to disallow claims
- Failure to consider contemporaneous expert analyses of exposure and settlement offers
- Use of hindsight
- Considered in discount rate risk?

Dates of Solvency Analyses

If a Company was insolvent at December 31, 2007 and at December 31, 2008, does that mean it was insolvent during all of 2008?
Taking a Step Back/Consideration of Results

Years of negative cash flows (before debt payments) result in negative Enterprise Value

<table>
<thead>
<tr>
<th>Projected Year</th>
<th>Debt Service (Quarterly $)</th>
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</thead>
<tbody>
<tr>
<td>2017</td>
<td>5,987,908</td>
</tr>
<tr>
<td>2018</td>
<td>5,966,708</td>
</tr>
<tr>
<td>2019</td>
<td>5,946,308</td>
</tr>
<tr>
<td>2020</td>
<td>5,926,708</td>
</tr>
<tr>
<td>2021</td>
<td>5,907,908</td>
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<tr>
<td>2022</td>
<td>5,889,808</td>
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<tr>
<td>2023</td>
<td>5,872,508</td>
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<tr>
<td>2024</td>
<td>5,855,908</td>
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<tr>
<td>2025</td>
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<td>2029</td>
<td>5,783,608</td>
</tr>
<tr>
<td>2030</td>
<td>5,772,808</td>
</tr>
<tr>
<td>2031</td>
<td>5,763,308</td>
</tr>
<tr>
<td>Total</td>
<td>31,394,800</td>
</tr>
</tbody>
</table>

**Illogical Results of Analysis**

- Fifteen years of consistent negative cash flows projected - yet considered a going concern
- Valuation conclusion- Company has negative **assets** (not equity) of up to $244 million
- Existing coal reserves - negative value (despite eventual sale in bankruptcy)
- Highlights flaws in:
  - Cash flow projections
  - Fair market value assumption
  - General Business logic
Current Status of the Matter

• Rebuttal Reports Issued
• Depositions of both experts completed
• Daubert motions against Trustee’s expert denied
• Since then, all but one party has settled
• Trial scheduled for early 2017

Questions?
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