

Best Practices Discussion

Due Diligence Procedures regarding Management-Prepared Financial Projections

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In commercial bankruptcy matters, there are many issues that a valuation analyst (“analyst”) may face when performing valuation services. These issues may relate to corporate solvency, transactional fairness, or reasonableness of a reorganization plan. One issue in which an analyst may be asked to provide valuation services relates to claims of fraudulent transfer. When analyzing fraudulent transfers, the analyst typically performs three tests in order to determine if a fraudulent transfer has occurred: (1) the balance sheet (or solvency) test, (2) the cash flow test, and (3) the capital adequacy test. In performing the three tests for a fraudulent transfer, the analyst may rely on management-prepared financial projections. This discussion summarizes the three tests involved in a fraudulent transfer analysis. And, this discussion addresses the diligence procedures that the analyst may apply when relying on management-prepared financial projections, including (1) the comparison of the financial projections to relevant industry data and (2) the comparison of management interview data to relevant company and industry data.

INTRODUCTION

Bankruptcy in the United States is a legal proceeding by which individuals and businesses that are facing financial difficulties in meeting their outstanding debt obligations may seek relief from part, or all, of their outstanding debt. The bankruptcy process is overseen by federal bankruptcy courts, and bankruptcy procedures are (for the most part) governed by federal law referred to as the “Bankruptcy Code.”

In filing for a corporate bankruptcy (Bankruptcy Code Chapter 7 or Chapter 11), there can be many valuation-related issues associated with the debtor company. These issues can include (1) corporate solvency, (2) transactional fairness, and (3) reasonableness of a proposed plan of reorganization for the debtor company.

In particular, an analyst may be asked to provide services related to whether a debtor company was solvent (or insolvent) as of a certain pre-bankruptcy valuation date (such as on the date of an alleged fraudulent transfer).

In a Chapter 11 bankruptcy (i.e., a reorganization bankruptcy, as opposed to a liquidation bankruptcy), under certain circumstances the bankruptcy trustee possesses the authority to avoid, or reverse:

1. certain transfers made by the debtor company or
2. certain liabilities assumed by the subject debtor company.

These transfers are generally referred to as “fraudulent transfers.”

To assist the bankruptcy trustee, legal counsel, or the affected creditors in assessing whether a debtor company's transfer was fraudulent, an analyst may be retained in order to opine on whether the debtor company was solvent (or insolvent) at the time of the alleged fraudulent transfer. This type of analysis is often referred to as a "solvency opinion."

In developing a solvency opinion, the analyst typically performs three tests: (1) the balance sheet test, (2) the cash flow test, and (3) the capital adequacy test. Similar to the process of valuing a business in a nonbankruptcy context, the income approach, and specifically the discounted cash flow ("DCF") method, may be applied to perform certain of the tests in a fraudulent transfer analysis.

Two of the components of the DCF method are the following:

1. The estimation/projection of future income and cash flow
2. The estimation of an appropriate risk-adjusted required rate of return used to discount the estimated future income back to present value

While many independent factors influence the estimation of both a debtor company's future income and the appropriate risk-adjusted required rate of return (i.e., present value discount rate), one often underanalyzed consideration in applying the DCF method is the debtor company industry.

This discussion introduces corporate bankruptcy and describes the fraudulent transfer analysis process. This discussion also describes the role of the company industry within the income approach, DCF method analysis, and specifically within the process of aligning the company industry with:

1. any management-prepared projections and
2. the estimated long-term growth rate applied in the calculation of the debtor company terminal value.

This discussion also addresses the importance of management interviews, namely as they relate to management-prepared financial projections applied in a DCF method analysis.

CORPORATE BANKRUPTCY AND FRAUDULENT TRANSFERS

There are many reasons why a company may find itself in financial distress and, ultimately, in bankruptcy. Rapid changes in the relevant com-

pany industry (such as the migration of customers from legacy cable television services to streaming services in the telecommunications industry) or macro-economic changes (such as the credit crisis and subsequent recession that began in 2008), can adversely affect the profitable operations and going-concern nature of a company.

Bankruptcy in the United States is a legal proceeding in which businesses (and individuals) facing financial difficulties in meeting their outstanding debt obligations may seek relief from all, or part, of their debt.

There are different types of bankruptcies, which are generally referred to by their chapter in the Bankruptcy Code. Which chapter the debtor will file under depends on the debtor company (i.e., often the party initiating the bankruptcy) and the type of bankruptcy.

For example, companies that intend to liquidate in order to satisfy outstanding debt obligations may file under Bankruptcy Code Chapter 7. Companies that intend to reorganize in order to satisfy outstanding debt obligations through continuing operations may file under Bankruptcy Code Chapter 11.

Related to the filing for a corporate bankruptcy (Bankruptcy Code Chapter 7 or Chapter 11), there can be many valuation-related issues. These valuation issues may include the following:

1. Corporate solvency (which, for companies other than partnerships and municipalities, is defined as the sum of a debtor company's liabilities being greater than the sum of the company's assets on a fair value basis, excluding exempt or fraudulently transferred property or assets)
2. Transactional fairness (i.e., analyzing whether certain transactions associated with the debtor company were fair on behalf of the bankruptcy estate)
3. The reasonableness of a debtor's proposed reorganization plan (i.e., analyzing whether the plan to satisfy certain debts associated with company is reasonable and attainable)

Analysts are often retained to perform services related to the above-mentioned valuation issues. An analyst who provides valuation-related services in a bankruptcy context should be familiar with both (1) the reasons to conduct a bankruptcy valuation and (2) the analytical issues that are specific to a bankruptcy-related valuation.

The following list provides some examples, as well as the Bankruptcy Code section citations, of

situations where it may be helpful to retain an analyst in a bankruptcy proceeding.

1. Preference actions solvency analysis (Bankruptcy Code Section 547)
2. Fraudulent transfers solvency analysis (Bankruptcy Code Section 548)
3. Asset sale prices and creditor adequate protection (Bankruptcy Code Section 363)
4. Adequate protection of a creditor's interest (Bankruptcy Code Section 361)
5. Value of secured creditor's claim as fully secured (Bankruptcy Code Rules 3012 and 3018)
6. Confirmation of the reorganization plan (Bankruptcy Code Section 1129)
7. Cram down of the reorganization plan (U.S. Bankruptcy Code Section 1129)
8. Secured creditor relief from the automatic stay (Bankruptcy Code Section 362)

While an analyst can provide valuation-related services in any of the above instances, this discussion focuses on analyst considerations within a fraudulent transfer solvency analysis (i.e., Bankruptcy Code Section 548).

Fraudulent Transfers and Subject Debtor Company Solvency

In a Chapter 11 bankruptcy, and under certain circumstances, the bankruptcy trustee has the authority to avoid or reverse (1) transfers made by the debtor company or (2) liabilities assumed by the debtor company.

To assist the bankruptcy trustee, legal counsel, or the affected creditors in assessing whether a company's transfer was fraudulent, oftentimes an analyst is retained in order to opine on whether the company was solvent (or insolvent) at the time of the alleged fraudulent transfer.¹

In order to analyze a possible fraudulent transfer, the analyst considers the following three financial conditions at a specific point in time:

1. Does the debtor company recorded liabilities exceed the fair value of the debtor company assets?
2. Does the debtor company have adequate cash flow to meet its liabilities as they mature?
3. Does the debtor company have adequate capital to meet its operating expenses, capital expenditure requirements, and debt-repayment obligations?

By analyzing the above financial conditions, the analyst can assess whether the debtor company's transfer was fraudulent.

As presented in *A Practical Guide to Bankruptcy Valuation*:

In a solvency opinion, the analyst opines as to the solvency of a debtor company at the time of certain corporate transactions. Generally, the solvency opinion is intended to demonstrate that the debtor company is solvent at the time that a debt is incurred, a dividend is disbursed, a distribution is made, an expense is paid, an asset is purchased, a security claim is issued, a class of equity is redeemed, one class of security is exchanged for another class and so forth.

Typically, the analyst performs the following three tests with regard to the analysis of a potential fraudulent transfer:

1. The balance sheet test [i.e., does the fair value of the subject debtor company assets exceed the reported value of the subject debtor company liabilities];
2. The cash flow test [i.e., does the subject debtor company have adequate cash flow to meet its liabilities as they mature]; and
3. The capital adequacy test [i.e., does the subject debtor company have adequate capital to meet its operating expenses, capital expenditure requirements, and debt-repayment obligations].²

The three fraudulent transfer tests provide the analyst with quantitative data related to the debtor company's financial repayment ability as of a certain date. If all three tests are "passed" (meaning, if the answer to all three tests is "yes"), then the relevant transfer is typically considered to not be fraudulent. Conversely, failing any one of the three solvency tests may be an indication of a fraudulent transfer.³

The following discussion summarizes each of the tests applied in analyzing a debtor company's potential fraudulent transfer.

Balance Sheet Test

The balance sheet test is often referred to as the "solvency test." That is, the balance sheet test "tests" the solvency (i.e., does the fair value of assets exceed the amount of liability?) of the company.

The balance sheet test is a process for analyzing whether a company's liabilities exceed the fair value of the company's assets as of a specific date (i.e., as of the alleged fraudulent transfer date).

The balance sheet test involves the restatement of the assets of the company (both tangible assets and intangible assets) from historical accounting book value to fair value or fair market value⁴ as of the date of the alleged fraudulent transfer (or immediately preceding the date of the alleged fraudulent transfer).

The amounts of all of the company liabilities are typically reported on the company financial statements and are subtracted from the estimated fair value of the company assets to assess solvency (e.g., a company is solvent if the fair value of the company total assets exceed the reported amount of the company total liabilities).

In determining solvency by applying the balance sheet test, the analyst typically first considers the highest and best use (“HABU”) of the company’s assets. The HABU identifies the reasonably probable and legal use of an asset that is physically possible, appropriately supported, financially feasible, and that results in the highest value.⁵

The HABU of the company assets typically indicates the appropriate premise of value to be applied in the balance sheet test (i.e., a going-concern premise of value or a liquidation premise of value). One premise of value that is often applied in a balance sheet test analysis is value in continued use, considering the debtor company assets as part of a going-concern business operation.

After performing the fair value analysis of the company’s assets (including financial assets, real estate and tangible personal property assets, and intangible assets), the analyst determines the amount of the company’s liabilities. In evaluating a company’s liabilities, it is important for the analyst to consider all current liabilities, all long-term liabilities, and (potentially) all contingent liabilities.⁶ A contingent liability is a liability that has the potential to occur depending on the result of an uncertain future event (such as unfunded pension liabilities) and is recorded in the accounting records of the company.

Finally, the analyst subtracts the total liabilities from the fair valuation of the total assets as of the alleged fraudulent transfer date.

The company then “passes” the balance sheet test if the fair value of the company assets is greater than the amount of the company’s total liabilities. Conversely, if the fair value of the company assets is less than the amount of the company’s total liabilities, then the company “fails” the balance sheet test.

Cash Flow Test

The cash flow test analyzes whether a company possesses an adequate level of cash flow to meet its debt obligations as the obligations come due.

The cash flow test analysis considers the repayment of all of the company debt obligations (both principal and interest) and typically requires an analysis of the company’s projected net cash flow over the relevant financing period (which is generally equal to the longest term of maturity for any of the company’s outstanding debt instruments).

In performing the cash flow test, the analyst typically estimates the projected cash flow available to meet debt obligations by examining the following:

1. Any excess cash available on the alleged fraudulent transaction date
2. The available cash flow generated over the relevant projection period (i.e., financing period)
3. The availability of any unused credit commitments, including lines of credit

A company is cash flow insolvent if it is unable to meet its debt obligations as they mature. The cash flow test differs from the balance sheet test in that it analyzes the company’s ability to make payments as they mature as opposed to determining whether the company’s assets are sufficient to meet its present and future liabilities.

The cash flow test is “passed” if the company is able to pay its projected debt obligations as they mature (from the excess cash available on the transaction date, the available cash flow generated over the relevant projection period, and/or any company unused credit commitments).

Capital Adequacy Test

The capital adequacy test (also sometimes referred to as the “reasonable capital test”) determines whether a company will have adequate capital to meet its operating expenses, capital expenditure requirements, and debt-repayment obligations.

The capital adequacy test is similar to the cash flow test in that, if a company has adequate capital, it will be able to meet its debt obligations as they mature.

The primary goal of the capital adequacy test is to evaluate the likelihood that the company will survive potential business fluctuations subsequent to the alleged fraudulent transfer date.

In order to properly evaluate a company for purposes of applying the capital adequacy test, the analyst typically performs a short-term sources and uses of funds analysis over the period subsequent to the alleged fraudulent transfer date (generally over the four fiscal quarters after the alleged fraudulent transfer date).

As presented in *A Practical Guide to Bankruptcy Valuation*:

[In performing the capital adequacy test,] [t]he analyst typically assesses and analyzes various debtor company operating scenarios, including the following:

1. the debtor company management's best estimate of future financial and operational performance;
2. whether there has been any change from the debtor company's recent historical financial performance; and
3. reasonable variations in the debtor company's revenue growth rate and profit margin.⁷



The capital adequacy test is “passed” if the company is determined to have sufficient cash to (1) pay its operating expenses, (2) fund its capital expenditures, and (3) satisfy its debt obligations.

FRAUDULENT TRANSFER ANALYSES, THE INCOME APPROACH, AND MANAGEMENT-PREPARED FINANCIAL PROJECTIONS

Similar to the process of valuing a business in a nonbankruptcy context, there are three generally accepted business valuation approaches that may be considered to estimate the value of a debtor company. Each generally accepted business valuation approach includes several generally accepted valuation methods. The three generally accepted business valuation approaches are (1) the income approach, (2) the market approach, and (3) the asset-based approach.

This discussion focuses on the income approach, and specifically the DCF method, in conducting a fraudulent transfer analysis.

The Income Approach

The income approach is based on the principle that the value of a company is the present value of the income the company is expected to generate. Two valuation methods within the income approach are (1) the yield capitalization method and (2) the direct capitalization method. The yield capitalization method is often referred to as the “DCF method.”

As mentioned, the income approach can be used to develop all three fraudulent transfer tests when analyzing an alleged fraudulent transfer of a com-

pany. However, the income approach is typically most applicable to both the cash flow test and the capital adequacy test.⁸

The DCF method is a generally accepted income approach method used to value companies on a going-concern basis, and specifically when analyzing an alleged fraudulent transfer. This method has appeal because it incorporates the trade-off between risk and expected return, an important component of the investment decision and value calculation process.

The DCF method provides an indication of value by estimating (1) the future income of a business and (2) an appropriate risk-adjusted required rate of return used to discount the estimated future income back to present value (i.e., present value discount rate).

In applying the DCF method, the analyst often assumes that the estimated future income will eventually stabilize. This long-term stabilized benefits stream can then be capitalized into perpetuity and discounted back to the valuation date. Generally, the value of the long-term stabilized benefits stream is called the “terminal value” (“TV”).

While there are many issues the analyst may consider in estimating the future income of a subject debtor company (and estimating an appropriate present value discount rate for a debtor company), applying the DCF method in performing the three tests in a fraudulent transfer analysis should also include appropriate consideration of the subject industry.

The analyst should consider the subject industry in:

1. assessing the reasonableness of management-prepared financial projections used in the three tests and

2. estimating the appropriate long-term growth rate to be used in the TV calculation.

Testing the reasonableness of management-prepared financial projections is especially important in bankruptcy-related engagements, as the management-prepared projections are likely to be scrutinized and challenged.

Further, when estimating the appropriate long-term growth rate to be used in the TV calculation, a subject industry analysis can provide a useful portrait of how the company fits within an industry by considering where the industry has been and where the industry is likely to be going.

As presented in *Financial Valuation Applications and Models*, the following list presents questions that can assist the analyst in developing a subject industry road map:

1. What are the prospects for growth?
2. What are the industry's dominant economic traits?
3. What competitive forces are at work in the industry and how strong are they?
4. What are the drivers of change in the industry and what effect will they have?
5. Which companies are in the strongest/weakest competitive positions?
6. What key factors will determine competitive success or failure?
7. How attractive is the industry in terms of its prospects for above-average profitability?
8. How large is the industry?
9. Is the industry dominated by a few large companies?
10. Are there many public companies in this industry?
11. How much merger and acquisition activity is occurring?
12. What are the barriers to entry?
13. Is it a regulated industry?
14. Who are the customers? Is that base growing?⁹

One of the analyst responsibilities when applying the income approach in a bankruptcy context is to align the appropriate management-projected income measure and risk-adjusted discount rate with the subject industry historical, current, and projected economic performance. This will, in effect, provide the bankruptcy trustee, legal counsel, or the affected creditors with a reasonableness test or “sanity check” with regard to the management-prepared financial projections that are used in the fraudulent transfer analysis.

The following section describes several resources that are available to obtain relevant industry data and information that can be used in an income approach analysis within a bankruptcy context.

Sources of Industry Information

There are many sources of industry information and data—including fee-based, trade association, and free data and information resources. While it is not practical to list all available sources of industry data, some of the more useful sources of industry data and information include the following:

1. **First Research:** First Research, owned by Dun & Bradstreet, publishes about 500 industry reports on approximately 1,000 industry segments. The reports, which run approximately 8 to 10 pages, typically focus on industry information related to suppliers, customers, and competitors.

Links to industry-related sources are also provided, and the reports are updated quarterly. First Research industry data are available at www.firstresearch.com.

2. **IBISWorld:** *IBISWorld* publishes various industry-related reports. Their regular industry reports are typically about 30 to 40 pages in length. These reports are updated periodically (depending on the industry) and include a five-year outlook. The reports are available for the United States and, in some cases, for certain countries outside the United States.

The *IBISWorld* specialized industry reports are updated less frequently, but typically contain roughly the same information as the full *IBISWorld* reports. *IBISWorld* also publishes business environment reports, which are about three to four pages in length. These reports cover wider economic issues that influence certain industries (such as housing starts and per capita income).

IBISWorld reports are available at www.ibisworld.com.

3. **CFRA Research:** CFRA industry reports (formerly S&P Industry Surveys) cover nearly 70 industries. These reports are typically more globally focused than the First Research and *IBISWorld* reports. The CFRA Research reports generally focus on the present situation and future outlook for each industry. Each report contains a section on how to analyze a company in that industry.

The CFRA Research reports are updated twice a year and are available through various platforms, including S&P NetAdvantage (which is available from some public libraries).

4. MarketResearch.com: This website contains reports from various market research companies. The reports included on the website may be screened by country and date, as well as by other criteria. The reports are available on almost every industry and subindustry. The price to purchase these reports, however, is sometimes significant.

The reports are available at www.marketresearch.com.

5. American Society of Association Executives: This society is a good way to identify trade associations by industry. Trade associations often publish industry forecasts, as well as benchmarking data and other industry-related information.

The American Society of Association Executives also publishes the annual *National Trade and Professional Associations Directory*. The American Society of Association Executives data are available at www.asaecenter.org/directories/associationsearch.cfm.

Some additional sources of benchmarking industry data and information include the following:

1. Intégra: The Intégra benchmarking reports provide the normalized financial performance for privately held companies in approximately 900 industry sectors. Users can also upload summary financial statements for an individual company and then select an industry in order to show a side-by-side comparison between the company and its relevant industry.

The Intégra data are available at www.microbilt.com/financial-benchmarking.aspx.

2. *Annual Statement Studies® Financial Benchmark Ratios*: This book, published by the Risk Management Association, is updated and provided annually. It is available both in print format and as an online



database. Relevant industry companies are sorted by the North American Industry Classification System (“NAICS”) code, and then by sales and asset sizes.

Financial ratios on over 700 industries are included, including various income and expense ratios such as gross profit, operating expenses, officer compensation, and depreciation and amortization as a percentage of sales.

The Annual Statement Studies® are available at www.rmahq.org/annual-statement-studies.

3. *IRS Corporate Ratios*: This book, published by Schonfeld & Associates, contains 10 years of corporate tax return data and financial ratios on over 250 industries. The data and information are categorized by NAICS code and asset size.

IRS Corporate Ratios is available at www.saibooks.com.

4. Bizminer Industry Financial 2.0: This database provides cash flow, profitability, efficiency, and debt/risk ratios on companies sorted by NAICS codes. Five-year comparative analysis is included.

The Bizminer Industry Financial 2.0 data and information are available at www.bizminer.com.

5. IndustriousCFO: This database, formerly known as FINTEL Industry Metrics, provides ratios and other benchmarking data on privately held companies. Companies are grouped by size and NAICS code. A

business performance scorecard is provided, which gives a snapshot of a subject company's operations compared to its industry peers. Long-term sustainable growth rate data and information are also included.

The IndustriousCFO data and information are available at www.industriuscfo.com.

The analyst may utilize the above-referenced industry resources when applying the income approach in a bankruptcy context to ensure that the subject industry historical, current, and projected economic performance align with the subject management-prepared projections.

In some instances, the analyst may identify significant differences between, for example, the growth expectations presented in management-prepared projections as compared to the growth expectations of the broader industry.

In those cases, additional due diligence may be useful in order to understand and explain the unique circumstances of the company relative to its industry peers. This procedure may help ensure that the fraudulent transfer analysis conclusions are adequately supported and will be able to withstand critique from the bankruptcy trustee, legal counsel, or the affected creditors.

The following section summarizes guidance from the valuation profession regarding the proper consideration of the company relevant industry when applying the income approach, DCF method, in a fraudulent transfer analysis context.

Guidance from the Valuation Profession

It is typically understood that the value of a business is influenced by the operational efficiencies, products, and competitive advantage of the company within the context of the historical, current, and projected state of the company industry.

It is important that the analyst not be myopic when applying the three solvency tests in an alleged fraudulent transfer context. Rather, the analyst should cross-reference a detailed analysis of the company with a broader view of the subject company industry, specifically highlighting where the company may fall within the industry, and why.

Valuation literature provides guidance with regard to the analysis of the company industry. As presented in *Understanding Business Valuation*, the general factors that the analyst should consider in analyzing the relevant industry include the following:

1. Who makes up the industry? Are there many companies or are there very few companies that control everything?
2. Is it a cyclical industry?
3. Is it a new industry with many new companies entering it, or is it a mature industry that has reached its saturation point?
4. What are the barriers to entry, if any, into the industry?
5. Is this a self-contained industry, or is it dependent on another industry?
6. Is the industry dependent on new technology? If so, is the appraisal subject keeping up with the industry?
7. Is the industry expected to change? If so, how will that affect the appraisal subject?
8. What is the forecast for growth within the industry?¹⁰

Also presented in *Understanding Business Valuation*, Gary Trugman reproduces a list from an American Society of Appraisers course. That list presents industry factors that the analyst may consider in analyzing management-prepared financial projections within the context of the subject industry, such as the following:

1. Growth prospects for the company's industry at the national and local level
2. Demand factors
3. Maturity of the industry
4. Structure of the industry and level of competition
5. Technological or economic obsolescence factors
6. Barriers to competitor entry¹¹

Based, in part, on the guidance above, it is important that the analyst vet the assumptions utilized in the income approach, DCF method analysis, to ensure they are reasonable as compared to the historical, current, and projected economic state of the subject industry.

Further, to help ensure the industry data obtained are applicable to the company, the analyst may classify the business activities of the company. Two methods used to classify businesses are the (1) Standard Industrial Classification ("SIC") system and (2) NAICS.

Upon determining an appropriate classification for the company, the analyst may utilize the

aforementioned industry resources to obtain data and information for companies or industries in the same classification.

Considering the data and information previously presented, valuation profession best practices suggest that the analyst appropriately considers the subject industry. Therefore, the analyst can ensure the company-management-prepared financial projections and estimated long-term growth rate applied in a TV calculation are:

1. consistent with the subject industry growth prospects;
2. reasonable as compared to the subject industry historical financial results; and
3. achievable based on the subject industry's geography and expected future outlook of the regional, domestic, and international (if applicable) economy within the subject industry's geographic outline.

As presented in item three above, it is important for the analyst to also consider the geographic economic influences on the subject industry historical, current, and projected economic performance. That is, the regional, national, and international (if applicable) economy may have a direct impact on the subject industry economic performance. The analyst may, therefore, consider and incorporate, as appropriate, geographic economic influences when analyzing the subject industry for purposes of a fraudulent transfer analysis.

Management Due Diligence Interviews

As mentioned previously, in applying the income approach to analyze a company (and specifically when applying the three fraudulent transfer tests), the analyst may consider the following:

1. The subject industry with regard to management-prepared financial projections
2. The subject industry with regard to the estimated long-term growth rate used in the TV calculation

However, the analyst should also be aware of the facts and circumstances surrounding the bankruptcy-related assignment. Namely, company management may purposely provide inaccurate data, information, and management-prepared financial projections due to interests that may not be aligned with the bankruptcy trustee, legal counsel, or the affected creditors.

Further, the company management may purposely provide conflicting data with regard to the

subject industry in order to paint a certain portrait of the future operations of the company.

The analyst may juxtapose any data and information provided by company management with nonbiased:

1. industry data,
2. historical company data, and
3. data received from other interviews with company senior management.

In order to perform proper due diligence with regard to management-prepared financial projections that are utilized in a bankruptcy context, the analyst may attempt to interview multiple members of company leadership.

Incorporating the data and information previously presented, valuation profession best practices generally suggest that the analyst assess the reasonableness of management-prepared financial projections by ensuring the projections meet the following criteria:

1. They are consistent with the company's growth prospects.
2. They are reasonable as compared to the company's historical financial results.
3. They are achievable based on the company's operating capacity and expected future capital expenditures.
4. They are reasonable as compared to the company's client and supplier projected financial results.
5. They are reasonable based on the company industry historical and projected financial results.
6. They are reasonable based on the expected future outlook of the regional, domestic, and international (if applicable) economy.
7. They are consistent with other company leadership interview results with regard to the company's historical, current, and projected financial results.
8. They are extensively documented and justified if the projections have been amended by the analyst.

To the extent possible, the analyst will vet the assumptions on which management-prepared financial projections are based. Further, and as presented in item number eight above, it is important that the analyst document and justify any changes made to the management-prepared financial projections as a result of considering the information uncovered in management interviews and the data analyzed with regard to the subject industry.

SUMMARY AND CONCLUSION

In a bankruptcy context, an analyst may be retained by the bankruptcy trustee, legal counsel, or affected creditors to perform an analysis within a fraudulent transfer context. In performing the three fraudulent transfer tests, the analyst may apply the income approach, DCF method.

When applying the DCF method to a debtor company, it is important for the analyst to consider any management-prepared financial projections. One component in applying the DCF method is the consideration of the subject industry.

The subject industry may be considered in (1) assessing the reasonableness of management-prepared financial projections used in the three fraudulent transfer tests and (2) estimating the appropriate long-term growth rate to be used in the TV calculation. Testing the reasonableness of financial projections is a typical procedure in bankruptcy-related engagements. This is because the management-prepared projections are likely to be intensely scrutinized.

Further, the analyst may also consider valuation profession best practices (and available industry data resources), and—if possible—conduct due diligence management interviews in order to properly apply the DCF method in performing the three tests included in a fraudulent transfer analysis.

Notes:

1. As presented in U.S. Bankruptcy Code Section 101, solvency is defined as, “(A) with reference to an entity other than a partnership and a municipality, financial condition such that the sum of such entity’s debts is greater than all of such entity’s property, as 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 [U.S. Bankruptcy Code] section 522 of this title; (B) with reference to a partnership, financial condition such that the sum of such partnership’s debts is greater than the aggregate of, at a fair valuation—(i) all of such partnership’s property, exclusive of property of the kind specified in subparagraph (A)(i) of this paragraph; and (ii) the sum of the excess of the value of each general partner’s nonpartnership property, exclusive of property of the kind specified in subparagraph (A) of this paragraph, over such partner’s nonpartnership debts; and (C) with reference to a municipality, financial condition such that the municipality is—(i) generally not paying its debts as they become due unless such debts are the subject of a bona fide dispute; or (ii) unable to pay its debts as they become due.”

2. Dr. Israel Shaked and Robert F. Reilly, *A Practical Guide to Bankruptcy Valuation*, 2nd ed. (Alexandria, VA: The American Bankruptcy Institute, 2017), 34.
3. It is important to note that, as presented in *A Practical Guide to Bankruptcy Valuation*, it is generally only necessary for the analyst to perform the balance sheet test in assessing the solvency of a subject debtor company. However, in practice, many analysts will perform all three of the above-listed solvency tests in analyzing a potential fraudulent transfer.
4. It is important to note that, while the U.S. Bankruptcy Code advises that the value of the subject debtor company’s assets should be determined “fair,” the U.S. Bankruptcy Code is not clear as to the appropriate standard of value to use in a balance sheet test. As presented on page 36 of *A Practical Guide to Bankruptcy Valuation*, “Most analysts apply either the fair value or the fair market value standard of value when performing the balance sheet test.”
5. Shaked and Reilly, *A Practical Guide to Bankruptcy Valuation*, 646.
6. *Ibid.*, 36, 608.
7. *Ibid.*, 37.
8. In applying the income approach in a balance sheet test analysis, the analyst relies on the debtor company’s projected income from the ownership/operation of the individual assets to value the company’s assets. However, it is important to note that ownership/operation income differs from business operating income in that it is derived solely from the use of the debtor company assets rather than from the sale of goods or services. Two methods that may be used in the balance sheet test income approach valuation method are (1) the direct capitalization method and (2) the yield capitalization method.
9. James R. Hitchner, *Financial Valuation Applications and Models*, 4th ed. (New York: John Wiley & Sons, 2017), 68.
10. Gary Trugman, *Understanding Business Valuation: A Practical Guide to Valuing Small to Medium Sized Businesses*, 5th ed. (New York: American Institute of Certified Public Accountants, 2017), 162.
11. *Ibid.*, 263.



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