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Business valuation in bankruptcy : a nonhauthoritative guide; Consulting services practice aid, 02-1

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AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

CONSULTING SERVICES
PRACTICE AID 02-1

AICPA

Technical Consulting

Business Valuation In Bankruptcy

A Nonauthoritative Guide

Member Innovation Team

NOTICE TO READERS

This Practice Aid is designed as educational and reference material for AICPA members and others who provide consulting services as defined in the Statement on Standards for Consulting Services (SSCS) issued by the AICPA. It does not establish standards or preferred practices.

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JUN 19 2002

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PREFACE

This Practice Aid is one of a series intended to assist practitioners in applying their knowledge of organizational functions and technical disciplines in the course of providing consulting services. Although these Practice Aids often deal with aspects of consulting services knowledge in the context of a consulting engagement, they are also intended to be useful to practitioners who provide advice on the same subjects in the form of consultation. Consulting services engagements and consultations are defined in the Statement on Standards for Consulting Services (SSCS), *Consulting Services: Definitions and Standards*, issued by the AICPA.

This series of Technical Consulting Practice Aids should be particularly helpful to practitioners who use the expertise of others while remaining responsible for the work performed. It may also prove useful to members in industry and government in providing advice and assistance to management.

Technical Consulting Practice Aids do not purport to include everything a practitioner needs to know or do to undertake a specific type of service. Furthermore, engagement circumstances differ and therefore the practitioner's professional judgment may cause him or her to conclude that an approach described in a particular Practice Aid is inappropriate.

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BUSINESS VALUATION IN BANKRUPTCY

1. INTRODUCTION

.01 The growing complexity of American business and the increasing sophistication of bankruptcy proceedings have resulted in an increase in the demand for business valuation services in the bankruptcy-distressed business arena. Today, CPAs with bankruptcy and business valuation training and experience are providing an increasing array of valuation services to a variety of parties, including bankruptcy trustees, debtors in possession, attorneys, creditor committees, company management, equity holders, lenders, workout specialists, and bankruptcy courts.

2. SCOPE OF THIS PRACTICE AID

.01 As one might expect, business valuations performed in a bankruptcy context expose practitioners to many unique issues not found in other valuation engagements. This Practice Aid identifies and discusses a number of these unique issues, and provides examples to help illustrate the topics covered. Be aware, it is not intended to be authoritative, nor is it intended to represent a comprehensive treatise on bankruptcy or business valuation. Further, it assumes that readers have a working knowledge of bankruptcy and business valuation principles and practices. For readers seeking additional information on these topics, we suggest consulting the nonauthoritative and authoritative references and educational programs listed throughout this Practice Aid.[1]

.02 This Practice Aid discusses professional standards; nonauthoritative and authoritative business valuation references and educational programs; valuation purposes, standards, premises, approaches, and methods commonly used in bankruptcy valuation engagements; bankruptcy situations requiring valuations; valuation issues unique to distressed and bankrupt companies; and illustrative examples of bankruptcy valuation issues, including a comprehensive case study.

.03 As with all forms of valuation and appraisal, business valuation is not an exact science. The market determines value; valuation analysts estimate value by determining the most probable price within a range of reasonably acceptable values. Readers are also reminded that in bankruptcy, differences are frequently resolved through negotiation between the parties. Therefore, readers are encouraged to keep these points in mind if they plan to provide business valuation services in bankruptcy situations.

3. PROFESSIONAL STANDARDS AND NONAUTHORITATIVE GUIDANCE

.01 Bankruptcy, valuation, and litigation services are considered consulting services provided by CPAs as business advisers. As such, AICPA Statement on Standards for Consulting Services (SSCS) No. 1 applies to these engagements. The SSCS are equally authoritative as the Statements on Standards for Attestation Engagements (SSAEs) and the Statements on Standards for Accounting and Review Services (SSARSs); and therefore, subject bankruptcy and business valuation engagements to Rule 201 of the AICPA Code of Professional Conduct. Rule 201 includes the standards of professional competence, due professional care, planning and supervision, and sufficient relevant data.

[1] In addition, the following AICPA Consulting Services Practice Aids may be consulted for quick reference regarding general bankruptcy and business valuation topics: 98-1, *Providing Bankruptcy and Reorganization Services*, and 93-3, *Conducting a Valuation of a Closely Held Business.*

.02 In addition to the general standards, specific consulting standards apply as established by the SSCS under Rule 202 of the AICPA Code of Professional Conduct. These standards include defining the client, client interest, understanding with the client, and communication with the client.

Authoritative Literature

.03 The following authoritative literature applies to litigation and bankruptcy services as well as any other service provided by CPAs in public practice:

- AICPA Code of Professional Conduct (particularly Rule 201)
- AICPA SSCS No. 1, *Consulting Services: Definitions and Standards*
- AICPA Statement of Position (SOP) 90-7, *Financial Reporting by Entities in Reorganization Under the Bankruptcy Code*

Nonauthoritative Literature

.04 Nonauthoritative publications include:

- AICPA Consulting Services Practice Aid 93-3, *Conducting a Valuation of a Closely Held Business* (New York: AICPA, 1993).
- AICPA Consulting Services Special Report 93-1, *Application of AICPA Professional Standards in the Performance of Litigation Services* (New York: AICPA, 1993).
- AICPA Consulting Services Practice Aid 93-4, *Providing Litigation Services* (New York: AICPA, 1993).
- AICPA Consulting Services Practice Aid 96-3, *Communicating in Litigation Services: Reports* (New York: AICPA, 1996).
- AICPA Consulting Services Practice Aid 98-1, *Providing Bankruptcy and Reorganization Services* (New York: AICPA, 1998).
- AICPA Consulting Services Practice Aid 99-2, *Valuing Intellectual Property and Calculating Infringement Damages* (New York: AICPA, 1999).
- Revenue Rulings 59-60, 65-193, 77-287, 80-213, 83-120, and 93-12.

.05 In addition to the sources listed above, the Appendix of this Practice Aid includes a noncomprehensive list of bankruptcy and business valuation reference materials frequently referred to by CPA business valuation practitioners.

Bankruptcy and Business Valuation Education

.06 In order to comply with the competency provisions of the AICPA Code of Professional Conduct, appropriate education is required. Several organizations provide bankruptcy and business valuation training programs and accreditations, including the AICPA, the Association of Insolvency and Restructuring Advisors (AIRA), the American Society of Appraisers (ASA), the Institute of Business Valuation Analysts (IBA), and the National Association of Certified Valuation Analysts (NACVA). The AICPA's business valuation training program includes basic and advanced courses and a two-day review course for an eight-hour exam, which leads to the AICPA's Accredited in Business Valuation (ABV) designation. The AIRA's certification program, which deals with bankruptcy and valuation topics, is divided into three parts, each of

which contains a three-hour examination. Successful completion of this program leads to the Certified Insolvency & Restructuring Advisor (CIRA) designation.

4. OVERVIEW OF THE PRACTICE AID

.01 The balance of this Practice Aid is devoted to selected key valuation situations and issues which are unique to bankruptcy proceedings and distressed companies. Before turning to these issues, however, we first present a brief overview of basic business valuation concepts in order to provide a point of reference for readers. We also introduce several bankruptcy terms that are more fully discussed in later sections. The next five sections include a discussion of the purpose and standards of value, premises of value, valuation approaches and methods, the valuation synthesis and conclusions, and discounts and premiums.[2] We then introduce a case study, which serves as the basis for the examples used throughout the remainder of the Practice Aid. Next, we turn our attention to a discussion and examples of special bankruptcy situations, which often require valuations. The topics covered include adequate protection, claims determination, asset recovery, plan confirmation, liquidation values, and intangible assets. This is followed by a discussion of reorganization value and plan confirmation valuation issues. Topics discussed include development of discount rates, overstatement of value attributable to interest tax shields, nontraditional measures of risk, normalization of earnings for the reorganized debtor, use of net operating losses, the costs of financial distress, application of market approaches, market rates of interest in cram downs, and potential discounts in the best interest of creditors test.

5. PURPOSE OF THE VALUATION AND STANDARD OF VALUE

Purpose of Valuation

.01 An important concept in business valuation is that value often depends on the intended purpose of the valuation; therefore, the same business often has different values depending on the valuation purpose. For example, a valuation performed for an employee stock ownership plan (ESOP) would normally differ from one performed for a synergistic combination. Similarly, bankruptcy courts determine value on a case-by-case basis and in light of the purpose of each valuation. It is also important to realize that as a bankruptcy case progresses through its various stages, a valuation determined for one purpose may not be binding with respect to another. For example, a valuation prepared for a hearing on adequate protection for a secured creditor may differ from a later valuation performed for the purpose of plan confirmation in a reorganization case.[3] Therefore, it is important for the valuation analyst to fully understand and properly document the intended purpose of each valuation.

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[2] For more complete discussions of bankruptcy and business valuation theory and practice, please see the list of reference materials presented in the Appendix.

[3] Joseph J. Burton, Jr., *Guide to Effective Bankruptcy Litigation* (Deerfield, IL: Clark, Boardman, Callaghan, 1996), page 14-8.

Standards of Value

.02 Traditional business valuations are usually performed under one of the following basic standards (or definitions) of value: fair market value, fair value, and investment value. In bankruptcy engagements, however, the terminology applicable to valuations is different and is often not clearly defined in the Bankruptcy Code or the applicable state statutes. Consequently, terminology must be derived from case law and the valuation analyst should work closely with an experienced bankruptcy attorney in determining precise meanings.

.03 Standards of value often encountered in bankruptcy engagements include:

1. Bankruptcy Code and case law—fair value,[4] reasonably equivalent value, and present fair salable value
2. State fraudulent transfer act—fair valuation
3. State fraudulent conveyance act—present fair salable value
4. Common law

Fair Market Value

.04 Generally, fair valuation has been interpreted by the bankruptcy courts to have the same basic meaning as fair market value, defined in Revenue Ruling 59-60 as:

> ...the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.

.05 Additionally, most interpretations of fair market value acknowledge that the willing buyer and seller are hypothetical persons who are dealing at arm's length, rather than any particular buyer and seller. Further, the definition implies that the parties have the ability and the willingness to buy or to sell. Finally, there is also general agreement that fair market value incorporates prevailing economic and market conditions as of the valuation date.[5]

6. PREMISE OF VALUE: GOING CONCERN VERSUS LIQUIDATION

.01 The premise of value refers to an assumption made by the valuation analyst regarding the most likely set of transactional circumstances that may apply to the subject valuation or some portion of it. In other words, the premise describes the type of market conditions the seller of the business interest might reasonably encounter, such as business as usual or liquidation conditions.

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[4] "Fair valuation" is generally interpreted by bankruptcy case law as fair market value. *See Andrew Johnson Properties, Inc.*, CCD Dec. ¶ 65,254 (D.C. Tenn. 1974). Other terms interpreted by the courts to have similar meaning include "reasonably equivalent value" (see *In re Roco Corp.*, 701 F .2d 978, 981-82 (1st Cir. 1983)), and "present fair salable value" (see *Moody v. Security Pacific Business Credit, Inc.*, 971 F .2d 1056, 3rd Cir. 1992). For present fair salable value, see also the Uniform Fraudulent Conveyance Act.

[5] For additional commentary regarding fair market value, see *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, by Shannon P. Pratt, Robert F. Reilly, and Robert P. Schweihs, 4th edition (New York, NY: McGraw-Hill, 2000), pages 28-30.

Premises of Value

.02 The main premises of value applicable to business valuations are as follows:[6]

1. Going-concern value—the value in continued use of the going-concern business enterprise
2. Liquidation value—the net amount that can be realized if the business is terminated and the assets are sold *piecemeal*, including the following:
   (a) Orderly liquidation—assumes each asset has normal exposure to the marketplace for the type of asset
   (b) Forced liquidation—assumes all assets are sold as quickly as possible, such as at an auction sale

.03 The premise of value should always reflect the facts and circumstances underlying each valuation engagement. In valuing a controlling interest in a nonbankruptcy engagement, the choice of premise is left up to the valuation analyst's assessment of the appropriate premise in relation to the highest and best use of the entity and its assets. In bankruptcy engagements, care should be taken to ensure that the highest and best use is reasonably available to the debtor and property in question,[7] and is not otherwise predetermined by the Bankruptcy Code, cases, or other applicable laws. For instance, in a chapter 7 case, the required premise is liquidation, and orderly liquidation values are typically used.[8] For example an orderly liquidation value of a retail outlet with a large number of locations may be based on the valuation of individual or groups of stores as a going concern for those locations where a market might exist for selected stores. In certain bankruptcy matters, however, the choice of premise is less clear and may require consideration of court precedent and the actual operating characteristics of the company and the intended use of the property. In these circumstances, the decision of whether to use the going concern or liquidation premise of value may be the single most important valuation-related decision.[9]

.04 Practitioners should also be aware that unless clear and convincing evidence exists to the contrary, bankruptcy courts often require going concern values. For example, in *Andrew Johnson Properties*,[10] the court said that if the bankrupt is a going concern at the time of the transfer of assets, the property must be valued as a going concern. The Seventh Circuit held that if the business is not on its "deathbed" at the time of transfer, going-concern values should be used and noted that caution should be taken to not consider property as dead simply because hindsight teaches that the debtor was on the road to financial disaster.[11] While in *In re Mama D'Angelo*,[12] the court found the debtor not to be a viable going concern and stated:

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[6] Shannon P. Pratt, *Valuing a Business*, 4th edition, page 33, lists a fourth premise, *value as an assemblage of assets*, which is defined as: "Value in place, as part of a mass assemblage of assets, but not in current use in the production of income, and not as a going-concern business enterprise." (That is, a mass assemblage of assets vs. piecemeal, but not a going-concern basis.)
[7] See *In re Peerman*, 109 B.R. 718, 722 (Bankr. W.D. Tex. 1989).
[8] Grant Newton, *Bankruptcy & Insolvency Accounting*, 6th edition, pages 460-461.
[9] Other factors such as capitalization (whether unreasonably small capital exists) and cash flow (whether the company is able to meet its debts as they become due) may also need to be considered. In this context, capital may generally be considered as the total resources avalable to a debtor (including cash, working capital, equity or borrowing capacity) to sustain operations and pay debt as it matures.
[10] *Andrew Johnson Properties, Inc.*, CCH Dec. ¶ 65,254 (D.C. Tenn. 1974).
[11] *Matter of Taxman Clothing Co.*, 905 F.2d 166 (7th Cr. 1990).
[12] *In re Mama D'Angelo, Inc.*, 55 F.3d 552 (10th Cir. 1995).

> I believe [the debtor] was a going concern and solvent...until on or about July 4, 1989.... [*A*]s of that date because the product could not be produced the company was dead on its feet, and was not a going concern.... And thus it not being a going concern the liquidation values...must be used.

.05 ***Operating Characteristics***. The following examples of company operating characteristics may help the valuation analyst choose the correct premise:

- Did the company have a recent history of losses?
- Was the company being operated under "business as usual" conditions?
- Was the company able to pay its bills on time, or was it on a COD basis?
- If the company wasn't paying on time, what were trade creditors being told?
- Was the company, or parts of it, being offered for sale, and if so, on what basis?
- Had crisis management or turnaround professionals been employed?
- Were employees leaving?
- What was the local or national press reporting about the company's activities?

Going-Concern Value

.06 Since this premise contemplates an ongoing business, generally, a going-concern premise allows accountants the widest latitude in terms of which valuation approaches and methods to consider (see "Valuation Approaches and Methods," below). Therefore, it is very important to have a thorough understanding of the various approaches as well as knowledge of the conditions that must exist before a particular approach can be used.

.07 In the bankruptcy environment, going-concern values are determined for a number of reasons, including the determination of reorganization value of an entity that will emerge from chapter 11, the valuation of collateral, and claims determination.

Liquidation Value

.08 As discussed in more detail below, typical bankruptcy situations requiring the determination of liquidation values include:

1. Meeting the best-interest-of-creditors test (chapter 11)
2. Helping chapter 11 creditors decide whether to accept or reject the plan
3. Determining liquidation values (chapter 7)
4. Valuing lenders' interests in cash collateral and determining the degree of adequate protection required
5. Determining solvency in preference and fraudulent conveyance issues

.09 Orderly versus forced liquidation values: The main difference between orderly and forced liquidation generally deals with the amount of time an asset is exposed to the marketplace.

.10 ***Orderly Liquidation Value***. In most cases, liquidation values are much lower than going-concern values. However, liquidation values do not necessarily mean the amount that would be obtained in a forced sale. For purposes of determining whether a plan meets the best-interest-of-

creditors test, "liquidation value" refers to the amount that could be obtained in an orderly, not a forced, liquidation, net of all related liquidation expenses. The assets should include not only the property on hand but also whatever may be recovered, including voidable preferences, questionable payments to creditors, assets concealed by the debtor, and sales of fixed assets. The liquidation value of a business is really a projected valuation, as of the date of consummation of the confirmed plan, based on anticipated asset recoveries, net of estimated expenses. These expenses generally include the following:

- Administrative expenses (legal, accounting, appraisal, auction, and so on)
- Operating expenses during the liquidation period (rent, losses on operations, insurance, and so on)
- Severance pay and other employee termination costs
- Costs associated with rejecting executory contracts and leases
- Costs associated with the recovery of assets for the benefit of the estate
- Taxes on gains of asset sales

.11 Generally, a one- to two-year liquidation period is assumed; however, the time period could be shorter, say six months, or longer, if warranted by the circumstances. Ideally, the time period chosen should be that which enables the company to realize the largest liquidation value possible in a reasonable time period. Often after the reasonable time period has passed and the bulk of a company's assets have been sold, any remaining assets are sold at auction.

.12 ***Forced Liquidation Value***. As a result of litigation and continuing disputes, often a chapter 7 liquidation can take on a forced sale atmosphere. An inability of a company to obtain limited financing during a chapter 11 can result in a forced liquidation. Also, the general atmosphere of a bankruptcy sale can affect selling prices because buyers often perceive a liquidating entity as dealing from a position of weakness. General industry practices can sometimes heavily influence prices as well. For instance, in certain industries such as heavy equipment, auction sales prices are published on a regular basis, which tends to limit the amount realized by the bankruptcy estate.

.13 Unlike orderly liquidation, an analysis prepared under a forced liquidation premise assumes that all assets are sold piecemeal and as quickly as possible rather than as a result of normal exposure to the asset's normal marketplace. Since assets are usually sold by auction to the highest bidder, the resulting selling prices are usually lower than those realized under any other premise.

7. VALUATION APPROACHES AND METHODS

.01 The three basic approaches to determine value in any business valuation are:

1. The market approach
2. The income approach
3. The asset-based (cost) approach

.02 Generally in bankruptcy engagements, each of these three main approaches is considered whenever a going-concern premise has been adopted. However, even when the premise is liquidation, more than one of these methods may still apply, especially when valuing individual assets or groups of assets. The valuation analyst should always carefully document his or her

consideration of each approach so readers of the valuation report will more fully understand how any conclusions were reached. This is particularly important in the next section, entitled "Valuation Synthesis and Conclusions."

.03 The three main approaches are briefly discussed below. In the following sections, we provide illustrative examples using these methods.

Market Approach

.04 The market approach determines value by analyzing similar public and private companies and completed transactions and applying value measures (multiples or capitalization rates) derived from the comparative companies or transactions to the subject company. This approach requires a thorough search for comparable companies and transactions and a detailed analysis and often adjustment of the data selected.

.05 Several similar methods used under the market approach are as follows:

1. *Guideline company valuation method*—This method determines value by first analyzing and normalizing the subject company's financial statements. Next, a comprehensive search for comparable public (guideline) companies is performed. Potential guideline companies are analyzed in detail to determine which multiples, if any, might be applied to the subject company. After selection, if needed, the multiples may be adjusted for differences between the guideline and subject companies. Finally, the adjusted multiples are applied to obtain an initial opinion of the subject company's value. (This area requires an extensive amount of practitioner judgment and familiarity with the proper use of multiples; accordingly, it is not recommended for inexperienced valuation analysts.)
2. *Comparable transaction method*—This method uses multiples derived from actual sales of closely held businesses and mergers and acquisitions (M&A) transactions involving publicly traded companies.
3. *Internal transactions of the subject company's stock*—When prior arms' length transactions involving the subject company's stock exist, the valuation analyst generally reviews the circumstances surrounding the transactions to determine whether the prices paid reflect the standard of value sought in the current valuation.

.06 Commonly used comparative multiples include the following:

- Price/earnings
- Price/gross cash flow
- Price/book value
- Price/revenues
- Market value of invested capital (MVIC)/earnings before interest and tax (EBIT)
- MVIC/earnings before interest, tax, depreciation, and amortization (EBITDA)
- MVIC/debt-free cash flow

Income Approach

.07 The income approach determines value by estimating the present value of the future benefit stream to be received by the asset's owners. Future benefits such as net cash flow or net income are estimated by the valuation analyst and capitalized or discounted to present value using a capitalization rate or discount rate (yield rate) that is comparable to other similar investments in the market.

.08 Generically speaking, "benefit stream" is any measure of income or cash flow that can be converted into value either by capitalizing or discounting at appropriate rates. Therefore, more than one type of benefit stream may be used, such as net income, net cash flow, or pretax income. Many practitioners prefer net cash flow because it measures the ultimate benefit stream that can be realized by the investor, cash, which is realized through dividends and share price appreciation. Also, in their calculation of discount rates, many valuation analysts use equity risk premiums from publications such as Ibbotson's annual *Stocks, Bonds, Bills and Inflation*,[13] which are derived from net cash flow data.

.09 Income approach methods include the following:

1. Capitalized returns:
   (a) Capitalization of earnings
   (b) Capitalization of net cash flow
2. Discounted future returns:
   (a) Discounted future earnings
   (b) Discounted net cash flow

.10 There are two major variations to the income approach: direct equity method and invested capital method. Both variations can be used with either the capitalized returns or discounted future returns methods.

.11 ***Valuing Equity Directly***. This involves identifying and valuing the economic income stream that is available to equity holders only, not debt holders. Therefore, it is important to develop and use a discount or capitalization rate that is appropriate only for equity. The discount rate is frequently computed using the build-up method or the capital asset pricing model (CAPM). A valuation analyst may value equity directly in the following situations:

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

.12 ***Valuing Invested Capital***. This variation measures value based on the economic income stream that is available to all invested capital (including debt holders) being valued. The discount rate used is derived from an entity's overall or blended cost of capital. A valuation analyst may want to value all invested capital in the following instances:

[13] *Stocks, Bonds, Bills and Inflation, Annual Yearbook* (Chicago, IL: Ibbotson Associates, annual).

- Valuations of controlling interests, especially if the capital structure is likely to be changed via a recapitalization
- Valuations of minority interests where debt levels are unusual

Asset-Based (Cost) Approach

.13 The basic theory behind the asset-based approach is: Current value of the assets minus current value of the liabilities equals the current value of the equity.[14] Equity in this sense means value of the company, not including its debt.

.14 When available, practitioners usually prefer generally accepted accounting principles (GAAP) balances as a starting point in applying the asset approach. However, because the assets and liabilities are revalued as of the valuation date, and certain assets and liabilities not appearing on the GAAP statement may be added, the revalued balance sheet usually differs significantly from the GAAP balance sheet. Therefore, a GAAP balance sheet may not normally be used as a proxy for the final valuation product.

.15 The asset-based approach usually works best with companies that have the following characteristics:

- Substantial tangible assets (asset intensive) such as holding and investment companies or natural resource and utility companies
- 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 to entry

.16 Asset-based methods require that all of a company's assets be considered for revaluation according to the appropriate standard of value chosen. Therefore, where the valuation analyst is unskilled in individual asset appraisal methods, such as intangible assets and intellectual property, machinery and equipment, and real estate, he or she may need to rely on the work of other experts.

.17 Although asset-based methods have many names, including net asset value method, asset accumulation method, and asset buildup method, the methods are very similar. Asset-based methods are primarily balance-sheet-oriented valuation methods, wherein the company's balance sheet is restated to the chosen standard of value. According to Shannon Pratt and Robert Reilly, in chapter 14 of *Valuing a Business*, there are two general categories included in the asset approach:[15]

1. *Individual valuation of assets and liabilities*—All of a company's assets and liabilities are analyzed and appraised individually. The business value of the company is the difference between the discretely appraised assets and liabilities.
2. *Collective valuation of assets and liabilities*—All of a company's assets and liabilities are valued in one analysis and calculation. The capitalized excess earnings method is

[14] See Shannan P. Pratt, *Valuing a Business*, 4th edition, chapter 14.
[15] See Shannon P. Pratt, *Valuing a Business*, 4th edition, chapter 14.

the most commonly used method under this category. Under this method, the value of the company's equity is the value of its net tangible assets plus its collective intangible assets (collectively goodwill).

8. VALUATION SYNTHESIS AND CONCLUSIONS[16]

.01 A valuation is performed to provide a value conclusion regarding a business enterprise or business interest. When more than one valuation approach is used they may yield similar results such that it doesn't matter how the different approaches are weighted. However, when different approaches result in materially different value indications, they must be reconciled into a single number to be used as the valuation conclusion. While performing the reconciliation, the valuation analyst should keep the following in mind:

- There is no precise guideline or formula for determining which approach is the most appropriate in a given business valuation.
- Ideally, the use of alternative approaches will yield virtually identical conclusions; in practice, this rarely occurs.
- Valuation conclusions are directly affected by the quality and quantity of available data, including market comparable companies or transactions, and the degree of access to desired company information which may be affected by disputes, litigation, loss of business records, and so on.

.02 ***Reconciling Divergent Results***. When complete information is available and the methods are properly used, the different valuation approaches usually conclude to a reasonably narrow range of values. Sometimes, however, one of the different methods used produces a conclusion that is materially outside the range of reasonable values. When this occurs, the valuation analyst should thoroughly investigate and rethink the process and methodology that resulted in the outlying conclusion. Often, an outlier is the result of a computation or logic error on the part of the valuation analyst. If this is the case, the error can be corrected and the discrepancy resolved. When the outlier is not the result of an error, the practitioner should review the attributes of ownership of the business interest that give rise to its underlying value. For instance, if cash flow available to owners is the primary value driver of a company, then the income approach may dominate, while in an asset-intensive company, the asset approach may be more appropriate.

9. DISCOUNTS AND PREMIUMS

.01 Before the final estimate of value is reached, the application of discounts and premiums must be carefully considered. Generally, the most significant discounts or premiums are usually those related to the degree of minority or control and the degree of marketability of the subject business interest. The appropriate point to apply discounts or premiums is closely related to the types of value implied by each method used. Therefore, each valuation method should be reviewed to determine the extent to which it implies a control or minority ownership interest and a fully marketable or less than fully marketable ownership interest. In cases where all the methods used imply the same characteristics (for example, a minority, marketable interest), any applicable discounts or premiums can be taken after relative weightings have been determined. If, however,

[16] See Shannon P. Pratt, *Valuing a Business*, 4th edition, chapter 19.

different ownership characteristics were implied, then these adjustments would be made separately for the different methods before weighting the methods.

.02 The assessment and application of discounts and premiums is a critically important aspect of most valuation engagements, regardless of the context in which it is performed (bankruptcy or otherwise). However, it is beyond the scope of this Practice Aid to provide further guidance on the subject of discounts or premiums. Many resources are available to the reader, some of which are identified in the Appendix of this Practice Aid, to assist in the assessment and application of discounts and premiums.

10. CASE STUDY

.01 The following case study is set within the passenger car and light truck segment of the automotive aftermarket distribution industry. The economic cycles and industry trends within the automotive parts manufacturing industry are highly correlated with the cycles and trends of the automotive aftermarket manufacturing industry. Accordingly, we have included an examination of the automotive parts manufacturing industry in our industry overview section in an effort to provide the necessary industry background for the case study.

Automotive Parts Manufacturing and Distribution[17]

.02 The auto parts manufacturing market is highly fragmented with companies ranging in size from mom-and-pop shops to large multinational corporations. There are four basic lines of business within auto parts manufacturing: original equipment manufacturing (OEM), replacement parts manufacturing, distribution, and rubber fabrication. This analysis focuses solely on replacement parts manufacturing and distribution.

.03 ***Replacement Parts Manufacturer Market.*** This market involves the manufacture of parts that replace or supplement parts that were originally included in the vehicle. Companies that serve this market can be independent or subsidiaries of automobile manufacturers. In addition, some participate in the original equipment market as well as replacement market.

.04 ***Replacement Parts Manufacturer Market Trends.*** The largest automakers have established a trend of spinning off their in-house parts manufacturing units. These moves will only strengthen the already cutthroat competitive environment. Additionally, the long-term trend is for the number of older model cars to increase. This trend favors parts suppliers, but at the same time the quality of original equipment has increased steadily, which limits the growth of this segment (3 percent is projected growth rate next year while gross margins should continue to average around 20 percent).

.05 ***Replacement Parts Distribution.*** These market players simply distribute the parts and accessories that are used to replace or supplement original automotive parts. This market is highly fragmented but there are some large industry players, including public companies. Distribution usually involves getting the part to the end user, either through middlemen or jobbers, or directly to the end user.

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[17] Standard & Poor's Industry Surveys: Autos & Auto Parts, December 30, 1999, Public company 10-K filed in December 1999, and the Automotive Aftermarket Industry Association Web site (www.aaia.org).

.06 Wholesalers have traditionally employed a three-step or full-service distribution process. This process involves the part manufacturer delivering to warehouse distributors who, in turn, deliver the parts to local jobbers who sell the parts to end users for installation. This type of distribution allows jobbers to provide parts to local area professionals such as service stations, garages, and major accounts in a timely and efficient manner.

.07 Recently, the three-step distribution process has begun to be replaced with a two-step, or direct, distribution process, which allows direct distributors to eliminate a level of distribution. Accordingly, a large jobber may purchase directly from manufacturers and sell directly to professional installers, or a warehouse distributor may skip the jobber level and sell parts directly to installers. The two-step process has evolved as a way to decrease capital needs and to halt the problems of shrinking margins. This process has proven successful in major metropolitan areas, where there are higher concentrations of professional installers.

.08 ***Replacement Parts Distribution Trends***. One of the largest challenges for distributors is to be able to deliver the right part to the right place in a timely and cost effective manner. This problem is only increasing as the car market expands into every area of the globe. In addition, the quality of original equipment has steadily increased which limits sales and distribution of replacement parts. The wildcard in terms of growth is how the Clean Air requirements from the U.S. Environmental Protection Agency will affect the market. Some part manufacturers have not yet been supplied with enough information to build and service the newly required parts. This could negatively affect sales and distribution trends in the future.

Company Overview

.09 Southeast Automotive Warehouse, Inc. (Southeast Automotive, and the Company) was founded in 1964 by John L. Clark. Currently, the Company's executive offices are located in Atlanta, Georgia. Southeast Automotive is primarily engaged in the distribution of automotive aftermarket products to jobbers and professional installers located in the Southeast and Midwest regions of the United States. The Company operates in the passenger car and light truck segment of the automotive aftermarket distribution industry. The Company conducts its business through 10 full-service distribution centers and 8 direct distribution centers. The Company also owns 50 jobbing stores located in the Southeast region.

.10 Until the mid-1990s, the Company operated solely in the Southeast and had achieved operating results at par with industry norms. In 1994 (coinciding with the appointment of John Clark's son, Spencer Clark, as Southeast Automotive's CEO), the Company implemented a strategy to significantly expand its operations. By 1998, the Company had expanded its operations to include one large jobber and three distribution centers in the Midwest. In addition, the Company completed the acquisition of Jones Automotive Warehouse, Inc. (Jones Automotive) in 1997 (the Jones Acquisition). Jones Automotive operated three full-service distribution centers and two direct distribution centers. In addition, Jones Automotive operated 49 jobbing stores through its wholly owned subsidiary, Advanced Automotive, Inc. (Advanced Automotive). All of the Jones Automotive distribution centers and jobbing stores operated in the Southeast region.

.11 For a number of reasons that will be discussed below, Southeast Automotive began to experience financial troubles in 1998. Over the next two years, the Company's operations and

financial condition continued to deteriorate. On January 15, 2000, the Company filed a petition for relief under chapter 11 of Title 11 of the U.S. Bankruptcy Code[18] in the United States Bankruptcy Court for the Northern District of Georgia.

.12 A number of factors led to the filing by the Company of the bankruptcy petition. The first factor was a significant increase in financial leverage. The Company's expansion (both the addition of new distribution centers in the Midwest and the Jones Acquisition) was financed predominately with debt. Prior to the Company's expansion, the Company maintained a capital structure in line with industry norms. On average, companies within the automotive aftermarket distribution industry maintain a capital structure of 70 percent equity and 30 percent debt (measured on a market value basis). At the peak of Southeast Automotive's expansion program, the Company's liabilities approached or exceeded the value of its assets.

.13 The second factor was the Company's unsuccessful efforts to expand into the Midwest market. While the automotive aftermarket distribution industry is highly competitive, competition is particularly keen in the Midwest region, and the three distribution centers and one jobber established in this region never generated sufficient earnings to cover the related debt service.

.14 The third factor was that the Company overpaid for its acquisition of Jones Automotive. The Company got caught up in a bidding war with a key competitor and adopted a "win at all costs" attitude towards the Jones Acquisition. Furthermore, many of the Company's executives had unrealistic expectations regarding the level of synergies that could be realized through the integration of Jones Automotive into the existing business.

.15 The fourth factor was that the Company created some discord with existing jobbers when they acquired Jones Automotive. As stated previously, Jones Automotive owned 50 jobbers in the Southwest region. Some of the jobbers supplied by Southeast Automotive resented the fact that, as a result of the Jones Acquisition, their supplier was now competing against them. As a result, Southeast Automotive lost some of its key accounts.

.16 The fifth factor was that the Company implemented an enterprise resource planning (ERP) system during its expansion phase. The Company was still experiencing significant computer "downtime" and processing errors at the time the bankruptcy petition was filed. The primary processing errors were lost orders and orders that contained erroneous product codes. Notwithstanding the existing problems, the Company's systems consultants had made considerable progress in resolving many of the system's problems and were of the opinion that by the summer of 2000 the Company's ERP system would be fully operational.

.17 Finally, the sixth factor leading to the chapter 11 proceeding was that the Company was behind the curve in making the transition from a full-service distribution process (or three-step process) to the direct distribution process (or two-step process).

.18 The historical financial statements for the Company are contained in Exhibits 1 through 4.

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[18] It has been assumed in the case study that the debtor has filed under chapter 11 of the Bankruptcy Code because complex and challenging valuation issues are more likely to arise in the context of a chapter 11 proceeding. A petition for relief can be filed under other chapters of the Bankruptcy Code. For an overview of the various chapters of the Bankruptcy Code, readers should refer to AICPA Consulting Services Practice Aid 98-1, *Providing Bankruptcy and Reorganization Services.*

11. NEED FOR VALUATIONS IN BANKRUPTCY

.01 The objective of this section is to describe the primary situations in a bankruptcy proceeding where the assistance of a valuation expert is needed. These situations include the following:

- Adequate protection
- Claims determination
- Asset recovery (including preferences, fraudulent transfers, and reclamation)
- Plan confirmation—Section 13 is devoted to the examination of unique valuation issues that may arise in the context of plan confirmation
- Liquidation values
- Intangible assets—Section 12 is devoted to the unique problems associated within valuation of intangible assets

Adequate Protection (Section 361)

.02 In situations where a creditor's security interest is in property that is endangered, depreciating, or being dissipated by the debtor's actions, the creditor may move the court for adequate protection. When a creditor seeks adequate protection he or she is asking the court to ensure that the status quo will be maintained throughout the duration of the automatic stay (the "stay"). The court has broad discretion in the method it chooses to remedy adequate protection problems.

.03 The legislative history indicates the process in which Congress intended to resolve adequate protection problems. First, the trustee or debtor-in-possession should propose a method for providing adequate protection. Then the creditor can accept, object, or negotiate an alternative solution. If the parties cannot reach an agreement the court will step in to resolve the dispute.

.04 Although a creditor may enter an adequate protection motion with the desire to continue a foreclosure action or stop the debtor from granting an additional lien on property in which the creditor holds a security interest, other remedies may be used. The court may require the debtor-in-possession to make cash payments to a creditor in situations where the value of the collateral is decreasing or where the amount of any security cushion is eroding as interest accrues. The court may also choose to grant relief from the stay in order to allow the creditor to seize assets in which the creditor holds a security interest. The court must balance the danger to the interests of the creditor against the necessity of the property to the debtor in the reorganization.

.05 ***Application***. Adequate protection may be required under three Bankruptcy Code sections:

1. Section 362 dealing with the automatic stay. For example, unless the security interest of the debtor is adequately protected, the court may remove the stay.
2. Section 363 dealing with the use (including the use of cash collateral), sale, or lease of property of the debtor. For example, the court may not approve the release of cash collateral until it has been determined that the affected creditors are adequately protected.

3. Section 364 dealing with the obtaining of credit. For example, before the court might approve the granting of a senior or equal lien under the priming of a secured creditor, the court must ascertain that the creditor is adequately protected.

.06 ***Sources of Adequate Protection***. If the court determines that the creditor is not adequately protected the court will grant the creditor relief from the automatic stay unless the debtor provides adequate protection. Adequate protection, according to section 361 of the Bankruptcy Code, may be provided by:

1. Requiring the trustee or debtor-in-possession to make cash payments to the extent that the stay (under section 362); or the use, sale, or lease (under section 363); or the grant of a lien (under section 364) results in a decrease in the value of the entity's interest in such property.
2. Providing an additional or replacement lien to the extent that the stay, use, sale, lease, or grant results in a decrease in the value of the entity's interest in such property.
3. Granting such other relief, other than entitling such entity to an administrative expense, that will result in the realization by such entity of the "indubitable equivalent" of the entity's interest in such property.

.07 Because the term *indubitable equivalent* is not defined in the Bankruptcy Code, courts will establish the standard for items that are acceptable. The indubitable equivalent requirement has been satisfied by the use of substitute collateral. Section 361(3) indicates that the realization of the indubitable equivalent standard is measured against the entity's interest in such property and not the value of the property pledged as collateral for the debt. Courts, as noted below, may require an equity cushion or an analysis of the specific risks threatening the collateral before concluding that the creditor is adequately protected. Most of the discussion is this section focuses on the need for adequate protection to allow the stay to continue in place.

.08 ***Equity Cushion***. An equity cushion is the value in the property above the amount owed to the creditor with a secured claim that will shield that interest from loss due to any decrease in the value of the property during the time the automatic stay remains in effect. Shortly after the Bankruptcy Code became law a large number of courts began to evaluate the amount of the equity cushions that exist to determine if some form of adequate protection was necessary to prevent the removal of the automatic stay. The bankruptcy court in *In re McKilips*, 81 B.R. 545 (Bankr. N.D. Ill. 1987) analyzed prior cases and concluded that an equity position of 20 percent or more constitutes adequate protection; an equity cushion of less than 11 percent is insufficient and a range between 12 and 20 percent has divided the courts.

.09 ***Analysis of Specific Risks***. As noted in *LNC Investment, Inc. and Charter National Life Insurance Co. v. First Fidelity Bank, et al.*, 1995 U.S. Dist. LEXIS 5065 (S.D. N.Y. 1995), not all courts, however, have endorsed this method of measuring adequate protection. See *In re Snowshoe Co., Inc.*, 789 F.2d 1085, 1090 (4th Cir. 1986). In *LNC Investment* a district court noted that recent decisions in the Second Circuit have rejected the equity cushion approach in favor of a more individualized analysis of the specific risks threatening the collateral. Even when applying equity cushion analysis and concluding that 65 percent equity cushion provides adequate protection, the bankruptcy court in *In re San Clemente Estates*, 5 Bankr. 605, 610 (Bankr. S.D. Cal. 1980) acknowledged that "this quantitative approach may have the salutary effect of giving precise guidance as to the standard to be used, but it does seem to be inconsistent with the Congressional intent that each case is to be judged on its own facts." In *In re Alyucan Interstate*

Corp., 12 Bankr. 803, 813 (Bankr. D. Utah 1981), the bankruptcy court noted that cushion analysis "is not fully alert to the legislative directive that the facts, in each hearing under Section 362(d), will determine whether relief is appropriate under the circumstances."

.10 Thus rather than focusing on the equity cushion as the method to use to determine adequate protection, emphasis is often placed on actual or likely diminution in the value of the collateral during the time between the petition date and the confirmation of the plan. The district court in *LNC Investment, Inc.*, referred to the decisions of several cases in order to establish the fact that courts are adopting alternative approaches to determining adequate protection.

.11 Also in *LNC Investment, Inc.*, the district court concluded that the approach of evaluating the merits of a lift stay motion is supported by the Supreme Court decision in *United Sav. Ass'n of Texas v. Timbers of Inwood Forest Assocs., Ltd.*, 484 U.S. 365 (1988). Here the Court recognized that a creditor is entitled to adequate protection payments if the security has depreciated during the term of the stay.

.12 ***Need for Valuation Services***. If the court determines that the creditor is not adequately protected the court will grant the creditor relief from the automatic stay unless the debtor provides adequate protection in the form of cash payments, additional or replacement lien, or the indubitable equivalent as described above. Thus, determining if the creditor is adequately protected is important for both the debtor-in-possession and the creditor. The creditor wants relief from the stay in order to take possession of the collateral that is securing the loan and the debtor-in-possession often wants to continue to have use of the property. In determining if a secured creditor is adequately protected not only must the current value of the collateral be determined, but also an estimation must be made as to the extent the collateral may be declining in value or will in the future decline in value. Thus, the value that is assigned to the collateral is critical to the determination of whether the debtor-in-possession retains the use of the property, or the stay is removed, giving the creditor access to the property.

.13 ***Valuation Approach***. It is expected that most valuations to determine adequate protection will be based on the premise that the business is a going concern. Liquidating values would be used for assets in businesses that are not expected to reorganize.

.14 Courts have generally preferred the market approach in establishing values. Accordingly, it may be necessary to afford significantly greater weight to the market approach in the final synthesis of value. However, if comparable market transactions are not available, it is appropriate to derive the value estimate from the income or asset-based approaches. For example, the value for account receivables pledged as security under a floating lien arrangement might be based on the receivables that are estimated to be collectable. In the case of inventory pledged where there is an active market for the inventory, the first value generally considered is replacement costs. Where the product is unique, the value may be based on the amount expected to be realized from the sale of inventory after selling costs and normal profit margins. Finally, when valuing the stock of a subsidiary, significant weight should be afforded transactions involving the stock of similar companies. If such transactions are not available, then it would be appropriate to derive the value estimate from the income or asset-based approaches. As can be seen from the above examples, the approaches to the determination of value will vary depending on the circumstances in each case.

.15 ***Case Analysis***. Southeast Automotive Warehouse, Inc. owns a building and land located in the Midwest, which it carries on its books at a book value of $626,000. The financial adviser for the debtor determined that a comparable facility nearby recently sold for $800,000. The location of this facility is similar in most respects to that of Southeast Automotive, except that the facility is only about 80 percent of the size of Southeast Automotive's facility. Even though the local economy had recently slowed, the financial adviser was somewhat surprised at the low price for this facility because three years ago Southeast Automotive refinanced the building increasing the debt on the facility to $1.3 million based on an appraised value of $1.65 million. The balance owed on the facility including unpaid interest is $1.2 million and is included in the long-term debt of Southeast Automotive. The financial adviser was also aware that a large number of similar facilities had been constructed in the last two years and that only about two-thirds of the facilities are rented. The most recent completed building held its open house on April 1, 2000. After reviewing other sales the financial adviser concluded that the sales price of $800,000 is in line with other recent transactions. In fact the building has declined in value by approximately $100,000 since the petition was filed. Further declines are anticipated as a result of the opening of the space nearby on April 1.

.16 Due to the decline in the value of the collateral, relief from the stay may be granted even though this property is needed for reorganization. To preclude the bankruptcy judge from granting relief from the stay, Southeast Automotive most likely will be required to provide cash payments to the lender, grant the lender a security interest in other property, or compensate the lender for the decline in value to provide that the lender realizes the indubitable equivalent of its interest in the property.

Claims Determination

.17 Valuation issues need to be addressed in the determination of several types of claims. Among them are secured, recourse, and election to have all of the claims considered secured.

.18 ***Secured Claims***. Under section 506 of the Bankruptcy Code the bankruptcy court may hold a hearing to determine the amount of the claim that is secured and the amount that is unsecured for under-secured claims. A secured claim is allowed for the value of the collateral and an unsecured claim for the amount of the claim in excess of the value of the collateral. The unsecured part of the claim may be included in the same class as other unsecured claims or in certain situations placed in a separate class. Often, the creditor and the debtor will agree on how the claim is divided between the part that is secured and the part that is unsecured without a hearing. Notice of the agreement will be filed with the court and unless there are objections by parties in interest the court will normally allow the claim as filed.

.19 ***Nonrecourse Considered Recourse***. Section 1111(b) allows a secured claim to be treated as a claim with recourse against the debtor in chapter 11 proceedings (that is, where the debtor is liable for any deficiency between the value of the collateral and the balance due on the debt) whether or not the claim is nonrecourse by agreement or applicable law. This preferred status terminates if the property securing the loan is sold under section 363, is to be sold under the terms of the plan, or if the class of which the secured claim is a part elects application of section 1111(b)(2).

.20 To illustrate this provision, consider the following. A corporation owns a building which is encumbered by a first mortgage of $8 million, a nonrecourse second of $4 million, and a nonrecourse third of $2 million. The debtor files a chapter 11 petition. The plan proposed by the debtor calls for interest and principal payments to be made to the first mortgage holder and a reduction of the amount to be paid to the second mortgage holder by $1 million. The third mortgagee will receive nothing, since it is estimated that the value of the property is only $11 million. The second and third mortgagees reject the plan. As a result, the building is appraised and determined to be worth $9 million. The allowed secured claims would be only $1 million for the second mortgagee and zero for the third mortgagee. However, because of section 1111(b), the nonrecourse mortgage is considered recourse and the provision of section 502(b), which disallows claims that are not enforceable, does not apply. Three million of the second mortgage and the entire amount of the $2 million third mortgage would be unsecured claims. If, however, the property is sold for $9 million under section 363 or as a part of the plan, the second mortgagee would receive only $1 million and the third mortgagee nothing; they would not have unsecured claims for their deficiency in collateral.

.21 ***Election to Have Entire Claim Considered Secured (Section 1111(b)(2)).*** Another election that is available under section 1111(b) is that certain classes of creditors can elect to have their entire claim considered secured. Such a class of creditors will normally be only one creditor. Multiple-member classes may, however, exist where there are publicly issued debentures, where an indenture trustee holds a lien on behalf of the debenture holders, or when there is a group of creditors that have the same type of liens, such as mechanics' liens. If there is more than one creditor in a class, the class can exercise the option only if two-thirds in amount and a majority in number of allowed claims vote for such an election. For example, in chapter 11 cases where most of the assets are pledged, very little may be available for unsecured creditors after administrative expenses are paid. Thus, the creditor might find it advisable to make the section 1111(b)(2) election. On the other hand, if there will be a payment to unsecured creditors of approximately 75 cents per dollar of debt, the creditor may not want to make this election. Note that the election is based on claims allowed, not just those voting. To be eligible for this election, the creditors must have allowed claims that are secured by a lien on property of the estate and their interest in such property as holders of secured claims must not be of inconsequential value. The election cannot be made if the holder has contractual recourse against the debtor or if the property is sold under section 363 or is to be sold under the plan.

.22 The purpose of this election is to provide adequate protection to holders of secured claims where the holder is of the opinion that the collateral is undervalued. Also, if the treatment of the part of the debt that is accorded unsecured status is so unattractive, the holder may be willing to waive his or her unsecured deficiency claims. The class of creditors that makes this election has the right to receive full payment for its claims over time. If the members of the class do not approve the plan, the court may confirm the plan as long as the plan provides that each member of the class receives deferred cash payments totaling at least the allowed amount of the claim. However, the present value of these payments as of the effective date of the plan must be at least equal to the value of the creditors' interest in the collateral. Thus, while a creditor who makes the election under section 1111(b)(2) has the right to receive full payment over time, the value of that payment is required to equal only the value of the creditor's interest in the collateral.

.23 Section 1111(b)(2) does not specify when the election must be made. It should not, however, be required before the property is valued under section 506(a). Bankruptcy Rule 3014 provides that the election may be made at any time prior to the conclusion of the hearing on the disclosure statement, or within such later time as the court may fix. The election is to be made in

writing and signed unless made at the hearing on the disclosure statement. Also, Bankruptcy Rule 3014 states that if the election, where there is more than one creditor, is made by the majority, it "shall be binding on all members of the class with respect to the plan." The Advisory Committee Notes to Bankruptcy Rule 3014 suggest that this election, once made and the disclosure statement approved, cannot be revoked unless the plan is not confirmed.

.24 ***Need for Valuation Services***. In order to establish the amount of the secured claim, for the creditor to make an election regarding how much of the claim should be considered secured, and to determine if the collateral is of inconsequential value in a section 1111(b)(2) election, it is necessary to determine the value of the asset pledged.

.25 ***Approaches to Valuation***. In many of the situations described above, the asset to be valued is an individual asset such as a piece of equipment or a building. Again, the approach to value assets pledged that is preferred by the court is to value the assets on comparable market transactions. For example, the value assigned to equipment might be based on the value received in recent sales of comparable assets. If market information is not available, replacement value adjusted to reflect condition of existing equipment may be used. In some cases the asset may be valued based on the cash flows that the asset will generate, discounted at an appropriate rate.

.26 ***Case Analysis***. As noted above Southeast Automotive Warehouse, Inc. owns a building and land located in the Midwest that has a book value of $626,000. The financial adviser for the debtor has determined that a comparable facility nearby recently sold for $800,000. The financial adviser was somewhat surprised at the low price for this facility because three years ago Southeast Automotive refinanced the building increasing the debt on the facility to $1.3 million based on an appraised value of $1.65 million. The balance owed on the facility including unpaid interest is $1.2 million and is included in the long-term debt of Southeast Automotive. The financial adviser is aware that a large number of similar facilities had been constructed in the last two years and that only about two-thirds of the facilities are rented. After reviewing other sales the financial adviser has concluded that the sales price of $800,000 is in line with other recent transactions. The bankruptcy court, in a hearing under section 506 of the Bankruptcy Code, accepted the valuation of the debtor determining that the building was actually worth only $1 million, over the objection of the secured lender who claimed that the value was at least $1.2 million. Based on the court's determination of value, the secured creditor will have a secured lien of $1 million and an unsecured claim of $200,000. Most likely the secured claim of $1 million will be in a separate class and the $200,000 unsecured claim will be included in the general unsecured class of claims.

.27 Assume that the note of $1.2 million secured by a warehouse with a value of $1 million was a nonrecourse note. Rather than divide the debt into both secured and unsecured parts, an election could be made by the secured lender to consider the entire debt secured. If the creditor made the election, the debtor must provide in the plan that the secured lender receive total payments (including both interest and principal) equal to the amount of the debt, or $1.2 million, and that the present value of the payments must equal the value of the collateral, or $1 million. Assuming that the plan provides that payments are made annually beginning one year after the plan is confirmed at market interest rate of 12 percent, payments of $547,350 at the end of years one and two and $105,300 at the end of year three would provide for total payments of $1.2 million with a current value of $1 million, and allow the debtor to force the plan on the secured lender if the secured lender does not vote for the plan.

Recovery Action

.28 Action may be taken by the trustee or debtor-in-possession to recover assets. Among the sources of asset recovery are preferences, fraudulent transfers, and requests for reclamation.

.29 ***Preferences (Section 547).*** The provisions of section 547 of the Bankruptcy Code grant the debtor-in-possession broad powers to recover transfers made immediately prior to the filing of the petition. There are five elements that must be met for a transfer[19] to be characterized as a voidable preference:

1. The transfer must be made for the benefit of a creditor.
2. The transfer must be made for, or on account of, an antecedent debt owed by the debtor.
3. The transfer must be made while the debtor is insolvent. Insolvency is presumed if the transfer is made within 90 days prior to bankruptcy.
4. The transfer must have been made within 90 days prior to the filing of the petition. In the case of insiders the time period is extended to one year.
5. The transfer enables the creditor to receive more than it would receive in a liquidation or in a transfer made pursuant to an exception.

.30 The time period to recover a preference from an insider is from 91 days to one year. Effective for bankruptcy petitions filed after October 22, 1994, the Bankruptcy Reform Act of 1994 amended section 547 of the Bankruptcy Code to overrule *In re Deprizio*, 874 F.2d 1186 (7th Cir. 1989). Under *Deprizio*, the trustee or debtor-in-possession was able to recover as preferences payments made to non-insiders if such payment benefited an insider during the period between 90 days and one year prior to bankruptcy. Thus, if the debtor made a payment to a bank on a loan personally guaranteed within 90 days and one year prior to bankruptcy, the payment could be recovered by the trustee or debtor-in-possession. The Bankruptcy Reform Act of 1994 provides that payments made to noninsiders between 91 days and one year prior to bankruptcy are not subject to recovery action under section 547 of the Bankruptcy Code.

.31 Under section 547(g) the debtor has the burden of proof to show that a transfer should be avoided as a preference. The effect of a finding that a transfer is an avoidable preference is to void the entire transaction—not just the excess over what would be received in a liquidation. In general, any payment made to an unsecured creditor who would not receive 100 percent on liquidation would be considered a preference. Payments to fully secured creditors cannot be preferences since by definition the secured creditor would receive full payment on liquidation.

.32 Section 547(f) provides that the debtor is presumed to be insolvent within the 90 days prior to the date the petition is filed. This presumption does not apply in the case of transfers to insiders between 91 days and one year prior to the filing of the petition. This presumption requires the adverse party to come forth with some evidence to prove the presumption. The burden of proof,

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[19] Transfer is defined as "every mode, direct or indirect, absolute or conditional, voluntary or involuntary, of disposing of or parting with property or with an interest in property, including retention of title as a security interest and foreclosure of the debtor's equity of redemption." Section 101(54). Using this definition, perfecting a security interest is a preference. *In re R & T Roofing Structural and Commercial Framing*, 79 B.R. 22 (D. Nev. 1987). Granting a change in status from unsecured to secured is also considered a transfer.

however, remains with the party in whose favor the presumption exists. Once the presumption is rebutted, then insolvency at the time of payment must be proved.

.33 Preferences are not limited to direct transfers benefiting the creditor. Indirect transfers benefiting a creditor are also avoidable as to the creditor who indirectly benefited from an otherwise allowable transfer. A simple example of an indirect transfer would be an instance where a debtor sells an asset to a third party in exchange for cash and the assumption of the debtor's obligations to a creditor. The creditor indirectly benefits from the transfer by substituting the debtor for the solvent third party and the creditor may also receive a security interest in the asset sold to the third party. For examples of indirect transfers see *In re Compton Corp.,* 831 F.2d 586 (5th Cir. 1987) involving a letter of credit; *Palmer v. Radio Corporation of America*, 453 F.2d 1133 (5th Cir. 1971) involving sale of a television in return for cash and assumption of a debt; and *In re Mercom Industries, Inc.*, 37 B.R. 549 (Bankr. E.D. Penn. 1984) in which debtor paid a noninsider creditor to benefit insider guarantors within one year of filing.

.34 *Exceptions*. Exceptions to the general preference rule are found in section 547(c). The transferee has the burden of showing that a transfer fits within one of the exceptions. If a transferee can meet the burden of proof then the debtor-in-possession will not be allowed to avoid the transfer even if the requirements of section 547(b) are met.

.35 *Contemporaneous exchange*. The first category of exceptions is for substantially contemporaneous exchanges for new value. *In re Wolf & Vine,* 825 F.2d 197 (9th Cir. 1987) deals with the question of whether payment by check is considered a contemporaneous transaction and, in the process, lays out the parameters for determining contemporaneity. The first question is whether the parties intended credit to be extended or the instrument to be negotiated at the earliest possible opportunity. Honoring the check within 30 days may raise a presumption that the exchange was contemporaneous and establish the date of delivery of the check as the payment date. If the check is not negotiated within 30 days, then the appearance is that some sort of trade credit is being granted and therefore it is not a contemporaneous exchange. In addition, the debtor must receive new value commensurate with the amount transferred. New value can be determined by reference to the ordinary contract law notion of fair consideration.

.36 *Ordinary course of business*. Bankruptcy Code section 547(c)(2) excepts ordinary course of business transactions from the debtor-in-possession's avoidance powers. In order to fit this exception the transfer must be both made in the ordinary course of business and according to ordinary terms. The primary intent of this exception is for the debtor to continue operating with as little interruption as possible, by not penalizing trade creditors who extended normal terms to the debtor immediately prior to the date the debtor filed its petition.

.37 In December of 1991, the Supreme Court took up the question of whether payments on long-term debt qualify for the ordinary course of business exception found in section 547(c)(2). *Union Bank v. Wolas, (In re ZZZZ Best Co., Inc.)* 112 S. Ct. 527 (1991). The ZZZZ Best case rests on facts that will be common to many bankruptcy proceedings. The debtor made two interest payments and paid a loan commitment fee during the 90 days prior to the filing of the petition. While leaving the specific issues of the payments in this case for the Appeals Court to deal with on remand, a unanimous Supreme Court held that there was no distinction between short-term and long-term debt within the language of section 547(c)(2) and that both short-term and long-term debt payments can qualify for the exception. The Court found that the only necessary analysis to determine whether the debtor-in-possession may avoid the transfer is that

contemplated by section 547(c)(2): Was the debt incurred in the ordinary course of business, was the transfer made in the ordinary course of business, and was the transfer made according to ordinary business terms? These factual determinations must be made on a case-by-case basis.

.38 *Security interests*. The third exception refers to transfers that create a security interest in property acquired by the debtor. The interest must secure property acquired by the debtor soon after the security agreement was signed and must be perfected within 20 days after the debtor receives the property. The general purpose of this exception is to allow the debtor to finance objects like trade equipment and grant the finance company a security interest in the purchased equipment.

.39 *New value*. Preferential payments can also be offset against new value granted to the debtor by the creditor. New credit must be unsecured and can only be netted against a previous preferential payment, not a subsequent payment. For example, if a trade creditor receives $10,000 in preferential payments and then sells the debtor $6,000 worth of unsecured goods on account the preference would be reduced to $4,000.

.40 *Floating lien on inventory and receivables*. Creditors can also receive a continuous interest in inventory and receivables to the extent that the amount of the outstanding balance does not decrease in the later of 90 days prior to the filing of the petition (one year in the case of an insider) or the date on which new value was first given under the security agreement creating such security interest.

.41 Consider a situation where 90 days prior to the filing, the debtor owed $200,000 and the value of debtor's inventory was $100,000. On the date the petition was filed, $150,000 was owed and the inventory was valued at $150,000. The creditor's position improved by $100,000, which is the amount of the preferential transfer.

.42 There are three final exceptions to the debtor-in-possession's section 547 powers. The first covers all statutory liens, which are not avoidable under section 545. The second excludes selected payments for alimony, maintenance, and child support and the third excludes consumer debt payments of less than $600 in the case of an individual debtor.

.43 ***Fraudulent Transfers (Sections 548 and 544).*** Fraudulent conveyances may be attacked under the Bankruptcy Code or under state law according to section 544(b) of the Bankruptcy Code. Section 548 of the Bankruptcy Code allows transfers within one year prior to filing of a petition to be avoided.

.44 Action under sections 548 and 544 must be brought within two years after the order for relief or, if a trustee is appointed in the second year, within one year after the trustee is appointed.

.45 *Bankruptcy Code*. There are two separate grounds for finding a fraudulent transfer under section 548. The provisions found in section 548 act to restrain the debtor from entering into transactions which defraud the creditors. For a transfer to come under this section it must have occurred within one year prior to the date the petition was filed.

.46 First, if the debtor entered into the transaction with the actual intent to hinder, delay, or defraud a creditor the transfer may be avoided. Those who became creditors before the fraudulent transfer and those who became creditors after the fraudulent transfer may utilize this section. All that is relevant is the intent of the debtor; thus, it is unnecessary to determine the solvency or insolvency of the debtor.

.47 The second section where valuation is important applies to transfers where the debtor conveys property or an interest in property for less than equivalent value and transfers where the debtor incurred an obligation for less than equivalent value. There is no need to show that the debtor intended to defraud the creditors. The transaction must have occurred when the debtor:

1. Was insolvent, or completion of the transfer must have caused the debtor to become insolvent,
2. Was engaged in a business or transaction, or was about to be engaged in a business or transaction, and was left with an unreasonably small capital, or
3. Intended to incur debts beyond its ability to pay as they matured.

.48 The nondebtor party to the transfer retains the right to recover to the extent that value was given to the debtor. The term "transfer" as noted above is extremely broad under the Bankruptcy Code and has been used to cover a wide range of economic activity. Two areas where this definition gains relevance are in foreclosure sales and leveraged buyouts (LBOs). In a foreclosure sale, courts were divided on the extent to which they should review the value received in a foreclosure sale. The Supreme Court in *BFB v. Resolution Trust Corp.*, 511 U.S. 512 (1994) held that when a real estate foreclosure sale is in compliance with applicable state law, the reasonable equivalent value is the price that is in fact received on such a sale and no further analysis is needed.[20]

.49 In an LBO the corporation must receive reasonably equivalent value for pledging its assets to secure the debt used to fund the buyout. The case of *Kupetz v. Wolf*, 845 F.2d 842 (9th Cir. 1988) gives some guidance as to when an LBO can be successfully attacked.

.50 The court used a four-step analysis in finding that no fraudulent transfer existed in this case. First, the court looked at whether the selling shareholders intended to defraud the corporation's creditors. Second, the court assessed whether the sellers knew that the transfer was being funded through an LBO. Third, the court considered whether the creditor had standing under the one-year time frame of section 548 or whether the existing creditors had the opportunity to take into account the creditworthiness of the corporation after the LBO when they extended credit. Last, the court examined whether the sale was largely "an asset depleting transfer" using the value of the company to pay for the acquisition. The above factors all play a part in determining whether the transfer was fraudulent, as do indicators of whether the parties acted in good faith.

.51 Based on the large number of leveraged buyouts that have filed a chapter 11 petition, it was anticipated that an increase in litigation over the fraudulent transfer issue could provide a further clarification of the applicable standards. However, in many of the cases the parties involved

[20] Some lower courts, prior to the Supreme Court decision, held that such foreclosures could be for less than fair consideration. For example, in *Durett V. Washington National Insurance Co.* (621 F.2d 201 (5th Cir. 1980)), the Fifth Circuit held that the foreclosure sale could be for less than fair consideration if the sales price is less than 70 percent of the property's value.

preferred not to litigate the issues. As a result, compromises were developed as a part of a plan and the issues were not debated in the courts.

.52 *State law*. State laws are generally based on one of three provisions:

1. Uniform Fraudulent Conveyance Act (UFCA). The UFCA is similar to section 548. It has no "reach back" provisions, but incorporates the state statutes of limitations that run from one to six years.
2. Uniform Fraudulent Transfer Act (UFTA). The UFTA has a reach-back of four years.
3. Statutory and common law. For states without UFTA or UFCA, an American version of Statute of 13 Elizabeth has been adopted. The statute of limitations for fraud will most likely apply from one to six years.

.53 Actions brought under UFCA, UFTA, or other state statutes are based on section 544(b) of the Bankruptcy Code, which allows action to be taken to recover transfers based on state fraudulent conveyance laws. The majority of states have enacted a version of either the UFTA or its predecessor the UFCA. The provisions of these acts are similar to those found in section 548. The major difference between the acts and section 548 is in the length of time a creditor (or debtor-in-possession in the case of section 548) can reach back to invalidate a transfer. As noted above, the UFTA carries a four-year reach-back period from the date the transfer was made or the obligation was incurred. In cases where the obligation was not discovered, another year can be added.[21]

.54 The Code and the acts define intentionally fraudulent transfers similarly but the sections dealing with constructive fraud are slightly different. Under the UFCA a conveyance is constructively fraudulent if a party is insolvent or will be made insolvent by the conveyance or if the conveyance is made without fair consideration. The UFTA and section 548 require reasonably equivalent value, which is a somewhat tougher standard for parties arguing that the transfer should be upheld.

.55 A debtor-in-possession is able to use the UFTA by application of section 544(b) of the Bankruptcy Code. By the terms of the intentional fraud section of the UFTA (section 4(a)(1)) there must be a creditor of the debtor in order for the debtor-in-possession to have standing to sue. In contrast, the constructive intent sections can only be used if there is a present creditor available who was also a creditor at the time of the alleged fraudulent transfer.

.56 The Statute of 13 Elizabeth (1571) is the forerunner of our current fraudulent conveyance statutes and may still apply in states which have not enacted either the UFCA or the UFTA. The statute arose from the practice of English debtors who would transfer their property to a friend for little value and avoid paying their creditors. After the creditors gave up on all attempts at receiving payment the property would be transferred back to the original owner. As in the newer statutes, the law was instituted to prohibit transfers that hinder, delay, or defraud creditors.

.57 ***Reclamation (Section 546)***. Under Uniform Commercial Code (UCC) 3-503(2)(a) and Bankruptcy Code section 546(c), a seller can require return of goods only if requested within 10

[21] Uniform Fraudulent Transfer Act, section 9. Stats have modified the applicable time period—in some cases by several years. A professional should look to the law in the relevant jurisdiction for guidance.

days of a transfer if the seller discovers the buyer is insolvent. A seller who transferred goods to the debtor in the ordinary course of business may reclaim the goods, if the seller demands reclamation, within 20 days after the debtor received the goods provided the goods were delivered within 10 days before the petition was filed. The court may only deny the seller's reclamation rights if it grants the seller either administrative priority or a lien. Courts generally construe the 10-day requirement literally and do not allow extensions or exceptions.

.58 ***Need for Valuation Services***. Generally most action taken to recover assets involves a determination that the debtor was insolvent at the time of the transfer. In order to establish if the debtor is solvent or insolvent, there must be a valuation of selected assets or the business.

.59 ***Valuation Approach***. Section 101(32)(A) of the Bankruptcy Code defines insolvent as:

> ...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, 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 this title;

.60 The analysis is normally referred to as the "balance sheet test" because a company's property (assets), at fair valuation, is compared to its debts (liabilities) as of a particular date; if its liabilities exceed its assets, it is insolvent. This definition explicitly excludes any assets (property) that the debtor may have transferred, concealed, or removed, with the intent to defraud, hinder, or delay its creditors. Assets that generally may not be listed on the balance sheet such as intangible assets, including patents, trademarks, trade names, and so on should be included. In *In Re Bay Plastics, Inc.*, 187 B.R. 315 (Bankr. C.D. Cal. 1995), it was held that goodwill should not be included in the determination of value. This conclusion appears to be consistent with other courts that have held that the value of the assets based on the balance sheet approach would be determined by estimating what the debtor's assets would realize if sold in a prudent manner in current market conditions.[22] Debts include estimates of contingent or unliquidated liabilities.

.61 In addition to the balance sheet test, another test to consider is the "equity test" which refers to the ability or inability of the debtor to pay obligations as they mature. It measures a company's ability to pay its bills as of a specific date and is concerned primarily with equity for the protection of creditors. The Bankruptcy Code primarily uses the balance sheet test to determine insolvency, not the equity test. Further, for purposes of filing an involuntary bankruptcy petition, insolvency is not a requirement. Nor is it necessary for a voluntary chapter 11 or a chapter 13 petition to be filed; however, petitions filed by a debtor where the equity or balance sheet test of insolvency does not exist may be dismissed. The court generally permits an involuntary chapter 7 or chapter 11 filing to proceed if the debtor fails the equity test.[23] However, the important part of the test is that the debtor must not be paying its debts as they become due, and not whether or not the debtor has the current resources to pay, but has chosen not to do so.

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[22] *Lamar Haddox Contractors*, 40 F.3d 118 (5th Cir. 1994). See paragraph .64 in this section and related cites.
[23] 11 U.S.C. section 303(h)(1) states "...the court shall order relief against the debtor in an involuntary case...only if the debtor is generally not paying such debtor's debts as such debts become due unless such debts are the subject of a bona fide dispute..."

.62 Before the balance sheet test can be conducted to determine solvency or insolvency, the appropriate premise must first be determined. The premise of value concept is often critical in insolvency-related valuations, because courts often require going-concern values, unless clear and convincing evidence exists to the contrary. See paragraph .03 in Section 6, "Premise of Value: Going Concern Versus Liquidation."

.63 Once the correct premise has been determined, the valuation analyst next considers which of the three basic approaches to value (market, income, or asset-based) should be applied. If a going-concern premise is appropriate, the practitioner should normally evaluate and document his or her consideration of all three approaches as they relate to the definition of insolvency, as defined by the Bankruptcy Code and as interpreted by the courts. Even a liquidation premise, which usually engenders an asset-based approach, may require consideration of the other two approaches, especially when valuing individual assets or groups of assets such as intangible assets and intellectual property.

.64 ***Fair Valuation***. Case law generally interprets "fair valuation," as referenced in section 101(32) of the Bankruptcy Code, to mean fair market value. Generally, courts under the Bankruptcy Act held that "fair value" was the fair market value of the property between willing buyers and sellers or the value that can be made available to creditors within a reasonable period of time. While these cases were based on the Bankruptcy Act, courts looking at the issue of insolvency for purposes of section 547 under the Bankruptcy Code have applied the same standard. For example, the Fifth Circuit in *Lamar Haddox Contractors*,[24] noted that "[t]he fair value of property is not determined by asking how fast or by how much it has been depreciating on the corporate books, but by 'estimating what the debtor's assets would realize if sold in a prudent manner in current market conditions.' *Pennbroke Dev. Corp. v. Commonwealth Sav. & Loan Ass'n*, 124 B.R. 398, 402 (Bankr. S.D. Fl. 1991)."

.65 In *In re Nextwave Personal Communications, Inc.*, 15 235 B.R. 277, 294 (Bankr. S.D.N.Y. 1999), the bankruptcy court noted that for purposes of determining insolvency under section 548 the three general approaches used to determine value apply—(1) the replacement cost approach, (2) the market comparison approach, and (3) income stream or discounted cash flow analysis. The bankruptcy court concluded that the market comparable analysis, subject to appropriate adjustments, was the appropriate approach to use in this case. The court noted that discounted cash flow analysis "is widely, if not universally, used in the business and financial world as a tool to assist management in making decisions whether to invest in or dispose of businesses or major assets. It is generally not used as a tool for determining fair market value, particularly when that determination can be made using either replacement cost or market comparables." (Id. p. 294.) In reaching this conclusion the bankruptcy court cited *Keener v. Exxon Co.*, 32 F.3d 127, 132 (4th Cir. 1994), cert. denied, 513 U.S. 1154 (1995)[25] where the court noted that "*fair market value* is, by necessity, best set by the market itself. An actual price, agreed to by a willing buyer and willing seller, is the most accurate gauge of the value the market places on a good. Until such an exchange occurs, the market value of an item is necessarily speculative."

[24] See also *In re Roblin Industries*, Inc., 78 F. 3d. 30 (2d Cir. 1996); *In re DAK Industries, Inc.*, 170 F.3d 1197 (9th Cir. 1999); and *In re Trans World Airlines, Inc.*, 134 F. 3d. 188 (3d Cir. 1998).

[25] See *Amerada Hess Corp. v. Commissioner of Internal Revenue*, 517 F.2d 75, 83 (3d Cir. 1975); *Ellis v. Mobil Oil*, 969 F.2d 784, 786 (9th Cir. 1992); *BFP v. Resolution Trust Corp.*, 511 U.S. 531, 548 (1994); *In re Grigonis*, 208 B.R. 950, 955 (Bankr. D.Mont. 1997).

.66 ***Value of Liabilities***. In determining the insolvency of the debtor for purposes of sections 547 and 548 of the Bankruptcy Code, debt is not necessarily measured at its face value. In situations where the debt was originally issued at a discount, it would appear that the debt should be valued at the initially issued price plus the amortization of the discount based on the effective interest method. For publicly traded debt, the Third Circuit held in *In re Trans World Airlines, Inc.*, 134 F. 3d. 188 (3d Cir. 1998), that the debt should be measured at its face value and not its market value.

.67 ***Retrojection and Projection***. Generally, a valuation of assets must be determined as of the date of the transfer at issue. Sometimes such a valuation may not be available. In certain instances, courts will provide for the use of evidence of insolvency on a date different from the date in question as competent evidence of the debtor's insolvency on that date.[26] Termed "retrojection" by the courts, it says that if "a debtor is shown to be insolvent at a date later than the date of the questioned transfer, and it is shown that the debtor's financial condition did not change during the interim period, insolvency at the prior time may be inferred from the actual insolvency at the later date."[27]

.68 ***Retrospective Appraisal***. According to the Uniform Standards of Professional Appraisal Practice (USPAP), 1998 edition, Statement on Appraisal Standards No. 3 (SMT-3), *Retrospective Value Estimates*, retrospective appraisals (effective date of the appraisal prior to the date of the report) may be required for certain matters. In its Statement, the Appraisal Standards Board concluded, "Data subsequent to the effective date may be considered in estimating a retrospective value as a confirmation of trends (that would reasonably be considered by a buyer and seller as of that date)."[28]

.69 ***Solvency Analysis***. Accountants and financial advisers are often hired by one or both parties to assert or rebut a solvency or insolvency conclusion. Practitioners should begin with a thorough evaluation of the debtor's operations on the date of the subject transfer(s). The valuation premise adopted by the financial adviser should be based on the operating characteristics of the debtor company in existence as of the date of the subject transfers. However, sometimes the adviser is given the premise by his or her client and in these instances, the adviser should make it clear in the report (statement of assumptions and limiting conditions) and in testimony that the client provided the valuation premise.

.70 ***Solvency or Insolvency—Positive or Negative Stockholders' Equity***. Using the Bankruptcy Code definition of insolvency and the appropriate premise, the valuation analyst considers and applies the applicable approaches and methods to value the company. The goal of the analysis is to conclude as to the value of the company's stockholders' equity (adjusted assets less liabilities) as of a particular date. A positive number indicates solvency, a negative number means that the company is insolvent.

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[26] See *In re Coated Sales, Inc.*, 144 B.R. 663, 666 (Bankr. S.D.N.Y. 1992).
[27] See *In re Arrowhead Gardens, Inc.*, 32 B.R. 296, 301 (Bankr. D. Mas. 1983).
[28] *USPAP 98, Uniform Standards of Professional Appraisal Practice*, Appraisal Standards Board, the Appraisal Foundation, 1998 edition, page 71.

Plan of Reorganization

.71 Valuation services are often needed in several parts of the process of developing a plan of reorganization. Often it is necessary to determine the value of the surviving business before a plan of reorganization can be developed. While this valuation is not required by the Bankruptcy Code, it is necessary for effective negotiations of a plan. Generally, it is much easier to negotiate a plan if all of the interested parties agree on the value of the business. Additionally, confirmation standards provided in section 1129 of the Bankruptcy Code may require a valuation of the business as described below.

.72 ***Feasibility***. Feasibility establishes the standard that confirmation of the plan is not likely to be followed by liquidation or the need for further financial reorganization unless such liquidation or reorganization is provided for in the plan. This requirement means that the court must ascertain that the debtor has a reasonable chance of surviving once the plan is confirmed and the debtor is out from under the protection of the court. A well prepared forecast of future operations based on reasonable assumptions, taking into consideration the changes expected as a result of the confirmation of the plan, is an example of the kind of information that can be very helpful to the court in reaching a decision on this requirement.

.73 ***Cram Down***. For a plan to be confirmed, a class of claims or interests must either accept the plan or not be impaired. However, subsection (b) of section 1129 allows the court under certain conditions to confirm a plan even though an impaired class has not accepted the plan. The plan must not discriminate unfairly, and must be fair and equitable, with respect to each class of claims or interest impaired under the plan that has not accepted it. The Code states conditions for secured claims, unsecured claims, and stockholder interests that would be included in the "fair and equitable" requirement. It should be noted that since the word "includes" is used, the meaning of fair and equitable is not restricted to these conditions.

.74 *Secured creditors' test.* According to section 1129 of the Bankruptcy Code, the plan must provide for at least one of the following to be fair and equitable:

1. The holders of such claims must retain the lien securing such claims, whether the property subject to such lien is retained by the debtor or transferred to another entity, to the extent of the allowed amount of such claims (see section 1124). In addition, each holder of a claim of such class must receive on account of such claim deferred cash payments totaling at least the allowed amount of such claim, of a value, as of the effective date of the plan, of at least the value of such holder's interest in the estate's interest in such property,
2. For the sale, subject to section 363(k), of any property that is subject to the lien securing such claims, free and clear of such lien, with such lien to attach to the proceeds of such sale, and the treatment of such lien on proceeds under clause (1) or (3) of this subparagraph, or
3. For the realization by such holders of the indubitable equivalent of such claims.

.75 *Unsecured creditors' test.* For holders of unsecured claims, the Bankruptcy Code provides that one of the two following requirements must be satisfied for each class that is impaired and does not accept the plan:

1. The plan provides that each holder of a claim of such class receive or retain on account of such claim property of a value, as of the effective date of the plan, equal to the allowed amount of such claim.
2. The holder of any claim or interest that is junior to the claims of such class will not receive or retain on account of such junior claim or interest any property according to section 1129(b)(2)(C).

.76 Members of the class must, if they have not accepted the plan, receive or retain property that has a present value equal to the allowed amount of the claim. Alternatively, the plan can contain any provision for a distribution of less than full present value as long as no junior claim or interest will participate in the plan. Implicit in the concept of fairness is that senior classes will not receive more than 100 percent of their claims and any equal class will not receive preferential treatment.

.77 *Stockholders' interest test.* The test for equity interests is very similar to the test for unsecured claims. Again, one of two standards must be satisfied for each class that is impaired and does not accept the plan:

1. The plan provides that each holder of an interest of such class receive, or retain on account of such interest, property of a value, as of the effective date of the plan, equal to the greatest of the allowed amount of any fixed liquidation preference to which such holder is entitled, any fixed redemption price to which such holder is entitled, or the value of such interest.
2. The holder of any interest that is junior to the interests of such class will not receive or retain under the plan on account of such junior interest any property according to section 1129(b)(2)(C).

.78 One major provision in the first standard is that the equity interest must receive the greater of liquidation preference, fixed redemption price, or the value of its equity. Thus, a corporation could not file a chapter 11 petition just for the purpose of taking advantage of the low liquidation value of preferred stock.

.79 *New value.* An issue that may arise under the cram down rules deals with the extent to which cram down might apply if the shareholders retain an interest due to the contribution of new capital and retain no interest due to their prior ownership interest in the corporation. The Supreme Court in *203 North LaSalle*, 526 U.S. 434 (1999), held that for such a condition to exist the bankruptcy court should consider if one of the following conditions existed:

1. The exclusivity period must be ended before confirmation providing an opportunity for other plans to be filed.
2. The bankruptcy court must provide an opportunity for other bids for the equity to be made for the equity interest.

Based on the decision by the Supreme Court it appears that if one of the above conditions is satisfied, then, for example, a class of unsecured creditors that voted against confirmation of the plan would be crammed down.

.80 ***Approaches to Valuation.*** The approaches used in determining values for the plan and for plan confirmation of a reorganized business are based on going-concern values. Common methods used to assess a debtor's reorganization value are the guideline public company methods (typically employing debt-free multiples) and the discounted cash flow method.

.81 ***Case Analysis.*** Section 13 of the Practice Aid discusses several issues relating to the assessment of a debtor's reorganization value. An examination of Section 13 prior to reviewing this portion of the case analysis relating to valuation for plan confirmation will provide necessary insight into the issues discussed here. The information contained below has been extracted either from the debtor's disclosure statement and plan of reorganization or from the deposition transcripts of the Company's valuation experts. The depositions were taken in the context of discovery associated with plan confirmation.

.82 Southeast Automotive achieved operating performance in line with industry standards in 1994 and 1995 (not shown in the comparative financial statements). Subsequent to 1995, the Company's operating performance began to deteriorate, with significant erosion of profitability occurring in 1998 and 1999 (see the Company's financial statements reproduced in Exhibits 1 through 4).

.83 In 2000, subsequent to the filing of the bankruptcy petition, the Company began to reverse some negative trends by stabilizing gross profit margins and reducing selling, general, and administrative expenses on a percentage of sales basis. Stabilization of gross profit margins was primarily achieved through the elimination of some unprofitable customer segments, product lines, and distribution locations. Further enhancement of the Company's gross profit margins should resume in the year 2003 as a result of the Company's continued efforts to increase penetration into more profitable customer segments, product lines, and locations.

.84 Another factor contributing to the stabilization of the Company's gross margins was the implementation of a new computer system. While the Company experienced significant cost overruns and processing problems in the early stages of its ERP (enterprise resource planning) implementation,[29] by mid-2000 many of the bugs had been worked out of the system. On a go-forward basis, the Company views the state-of-the-art information system as one of its competitive advantages. Among other things, the new system employs an Internet interface that links directly to the Company's inventory and purchasing systems. Accordingly, when a customer logs on to the Company's Web site, the system retrieves a detailed product listing, which includes the customer's pricing structure. Once the product is ordered, the order information is transmitted to the warehouse for order fulfillment and is posted to the Company's inventory system. Purchasing is notified when inventory of a particular product reaches a certain level so the Company can place an order for additional product with its vendors. The new ERP system is linked directly with the information systems of the Company's primary vendors so that purchases can be filled more expeditiously.

.85 Improvements in selling, general, and administrative expenses were, and will continue to be, made through reduction of work force and various other cost cutting measures.

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[29] Problems associated with the implementation of the enterprise resource planning system represented one of the factors that contributed to the Company's bankruptcy.

.86 Company management has indicated that, not only will the trend of declining sales reverse in the year 2001, but its top line growth will also exceed overall industry growth rates for at least the next five years. Justification for the Company's sales estimates is as follows:

1. The elimination of unprofitable operations was essentially complete by December 2000.
2. The Company's expansion efforts will be directed to higher growth markets—markets where the Company has historically operated.
3. The automotive aftermarket distribution industry has begun to experience some "shake out." The shake out will alleviate a limited amount of competitive pressure in certain locations. Furthermore, it is anticipated the Company will be able to expand operations through the procurement of distribution facilities that have become available due to the insolvency of the smallest distributors.
4. The enhanced information system will enable the Company to increase customer satisfaction by increasing fill rates, reducing delivery times, and providing sales and customer service representatives with more information regarding product availability and order status. The Company believes increased customer satisfaction will, in time, equate to increased sales. In addition to the benefits discussed above, the Company believes its enhanced computer system will enable it to better identify and target customer segments, product lines, and distribution locations with the highest growth potential.

.87 The income tax rate has been calculated under the assumption that the Company will be taxed at a federal income tax rate of 34.0 percent and a state income tax rate of 5.0 percent. The effective rate is 37.3 percent due to the fact that state income taxes are deductible for federal income tax purposes.

.88 Working capital requirements are assumed to be 8.0 percent of the increase in sales. In other words, for every $1.00 increase in sales, the Company will invest in $0.08 of working capital. Working capital requirements have been estimated based on the historical changes in sales relative to the historical changes in inventory, trade receivables, and trade payables for the Company, as well as publicly traded companies operating in the same industry.

.89 The level of historical capital expenditures for the Company and management estimates indicate that the Company's depreciation expense will exceed capital expenditures by $250,000 in the years 2001 and 2002, and that the Company's capital expenditures will exceed depreciation expense by $275,000 in the years 2003 and 2004. It is assumed capital expenditures will equal depreciation expense for all years subsequent to 2004.

.90 The Company's valuation expert estimates that the unlevered cost of capital for the automotive aftermarket distribution industry is 12.0 percent.[30] Given the fact that the Company is smaller, on average, than other companies in the industry, the overall cost of capital has been increased by 4.0 percent to adjust for size differences. After the size adjustment, the overall cost of capital estimate is 16.0 percent.

[30] The rationale for starting with the unlevered cost of capital is explained in Section 13 of this Practice Aid.

.91 The Company has made significant operational improvement over the past 18 months and has demonstrated that future improvements are likely to occur. In addition, the Company has a significant amount of tangible assets, particularly receivables and inventory, that will function as collateral in obtaining loans from traditional lenders. Accordingly, the Company's valuation expert has concluded that it is appropriate to develop a discount rate using more traditional techniques. However, the Company was still generating negative earnings before debt service and taxes, and was still in the process of identifying and implementing numerous improvements to its operations. In light of the degree of continued uncertainty surrounding the Company's long-term viability and other industry and company specific risk factors, the Company's valuation expert believed that an additional layer of risk premium should be added. While the expert's additional risk premium was somewhat subjective in nature, she believed a reasonable premium was 2.0 percent, bringing the discount rate to 18.0 percent.

.92 Given the fact that a form of adjusted present value (APV) has been employed in assessing the reorganization value of the Company,[31] the value estimate shown on row 20 of Exhibit 5 does not include the element of value attributable to tax shields. Accordingly, calculations regarding tax shields, both the use of net operating losses (NOLs) and interest expense deductions, are shown in Exhibit 6.[32] The estimated value of tax shields carries over from Exhibit 6[33] to row 21 of Exhibit 5 to derive the Company's estimated reorganization value of $47,839,326 (see row 22 of Exhibit 5). It is important to note that the value estimate is for the value of the Company's total assets, as opposed to the value of its equity.

.93 In light of the value estimate detailed in Exhibit 5, the Company proposed cash distributions, the issuance of new debt, and the allocation of stock ownership included in Exhibit 7. As can be seen, the plan provides for payment in full of all administrative expenses upon confirmation. In addition, the debtor-in-possession (DIP) lender, the holders of secured long-term debt, and the prepetition tax claimant will receive new debt. Accordingly, all the above-mentioned claimants will receive 100 percent recovery according to the plan. Obligations under credit facility will receive an 8.5 percent interest in the reorganized debtor. This represents a 100.3 percent recovery. Trade payables and other unsecured obligations will receive an 88.5 percent interest in the reorganized debtor, and subordinated debt will receive a 3.0 percent interest. The recovery to both of these latter claimants will be significantly less than the amount of their claims.

.94 We have employed adjusted present value (APV) in the case analysis, even though the fact scenario contains some significant elements of an operational restructuring, in an effort to educate the reader in a less intuitive and traditional valuation technique. In addition, we have not included a reduction to value attributable to the costs of financial distress. We have done this for two primary reasons: first, we are presenting a valuation from the debtor's perspective, and second, most of the costs of financial distress are already reflected in the debtor's historical numbers given the fact that the debtor has been in bankruptcy since January 2000 and we are estimating the value of the reorganized debtor upon emergence from bankruptcy. Some would argue that the proposed company-specific adjustments to the discount rate do not adequately factor into the

[31] While advantages may exist in certain circumstances to employing adjusted present value (APV) in determining the reorganization value of a debtor, numerous other approaches and techniques can be employed when determining the reorganization value of a debtor. The application of APV is discussed in Section 13 of this Practice Aid.

[32] A detailed discussion regarding the use of net operating losses (NOLs) in the context of a bankruptcy is included in section 13 of this Practice Aid.

[33] Depending on the facts and circumstances, some finance academics discount the interest tax shields at the cost of debt, rather than the weighted average cost of capital (WACC) (assuming the pretax cost of debt) or the opportunity cost of capital.

valuation the costs of financial distress due to the probability that the debtor's plan of reorganization, subsequent to plan confirmation, may fail and the ultimate realization of the debtor's assets will be orderly-disposition value. While arguments can be made for either approach, we acknowledge that the value estimate contained in the Practice Aid, due to the need for succinctness and simplicity, is oversimplified. In addition, due to a variety of constraints, we are unable to examine many valuation nuances and discuss all perspectives when assessing the value of a reorganized debtor. In an effort to offer as much information and as many perspectives as possible on the topic of assessing a debtor's reorganization value, we encourage readers to examine the materials listed in the Appendix, particularly the materials contained at Damodaran Online relating to the estimation of risk parameters and the valuation of financially distressed businesses, as well as Chapters 17, 18, and 19 of Brealy and Myers, *Principles of Corporate Finance* (see the Appendix for specific references).

Liquidation Values

.95 It is necessary for the creditors or stockholders who do not vote for the plan to receive as much as they would if the business were liquidated under chapter 7. The requirement as set forth in section 1129(a)(7) of the Bankruptcy Code is referred to as "best interest of creditors test." The first part of this requirement is that each holder of a claim or interest in each class must accept the plan or will receive, as of the effective date of the plan, a value that is not less than the amount the holder would receive in a chapter 7 liquidation. Note that the first alternative is that each holder must accept the plan. Thus, if any holder does not vote or votes against acceptance, it is necessary for the liquidation values to be ascertained. This requirement, in fact, makes it necessary for the court to have some understanding of the liquidation value of the business in practically all chapter 11 cases, since there will almost always be some creditors who do not vote. The extent to which the liquidation values will have to be applied to individual classes other than those of a large number of unsecured claims will depend on the manner in which the claims are divided into classes and whether there are any secured classes with a large number of claims.

.96 ***Valuation Approach.*** Liquidation value does not necessarily mean the amount that would be obtained in a forced sale but most likely refers to that amount that could be obtained in an orderly liquidation. For example, in the case of Revco, liquidation over a period of nine months was used. Stores that could be sold as going-concern businesses were valued at the amount that could be realized on the sale and not on the basis of a going-out-of-business sale. For additional discussion of valuation approaches and related issues, see Section 6, "Premise of Value: Going Concern Versus Liquidation," and Section 7, "Valuation Approaches and Methods."

.97 ***Case Analysis.*** The objective of the hypothetical liquidation analysis that follows is to estimate the liquidation proceeds that might be available for distribution and the allocation of these proceeds among the classes of claims and interests based on their relative priority. Exhibit 8 shows that the liquidation value of the individual assets is approximately $30.7 million. From this we have deducted $1.1 million in direct costs of liquidation, leaving a balance of $29.6 million. To this, we have added $1.3 million from the assumed collection of voidable preferences and other recovery actions, bringing the total expected from liquidation proceeds and recoveries to $30,872,000. As shown in Exhibit 10, this is the total amount available for distribution to secured, priority, and general unsecured creditors.

.98 Exhibit 9 contains the book value of liabilities and the amount of the claim that has been allowed. Because adjustments have been made to the books and records under the provisions of SOP 90-7, *Financial Reporting by Entities in Reorganization Under the Bankruptcy Code*, adjusting the liabilities to the amount of the claim, there is no difference between the book values and the allowed claim or the liquidation value of the liabilities. The liability that may still be subject to adjustment is the dividend payable. As noted above, the proposed plan does not provide for any consideration to be paid to these claim holders. The liabilities in Exhibit 9 are presented in accordance with the requirements of SOP 90-7 and identify the postpetition liabilities and liabilities that are not subject to compromise and the impaired claims (liabilities subject to compromise) and interests. This case study assumes that $6 million in unfunded pension liability was recorded during 2000 and that this liability is subject to compromise at December 31, 2000. The long-term debt represents the unpaid balance plus accrued interest as of the filing date. The $3.5 million subordinated debt was originally issued to various members of the Jones family in connection with the Company's 1997 acquisition of Jones Automotive. As of the filing date, the unpaid balance, including accrued interest, was $3,295,000.

.99 The following analysis estimates the fair market value of the Company's net assets under the orderly liquidation premise. In this example, numerous assumptions have been made. First, it is assumed that if the debtor's case were converted to chapter 7, the Company would lose the support of its employees, customers, and suppliers and, therefore, would not be able to operate over an extended period of time. Second, as a result of the Company's operating problems and deteriorating industry conditions, we have further assumed that potential offers from prospective purchasers would be extremely low. As a result, this hypothetical analysis assumes a straight liquidation of the debtor's assets during a six-month period, versus the sale of the debtor's operating businesses as a going concern.

.100 The following additional assumptions were made about asset sales.

1. Net proceeds from collection of accounts receivable and sale of inventory (net of related collection costs and expenses) will approximate 79 percent and 48 percent, respectively, of the asset carrying values.
2. Collection of 95 percent of the receivable arising from the sale of certain assets of Company subsidiaries.
3. Salable trademarks were separately valued at $310,000. (See related valuation at Exhibit 11.)
4. During the Company's long operating history in the Southeast, it acquired a number of below-market rate leases with a total value of approximately $2.0 million, net of past due amounts owed to landlords.
5. Current market value of land and buildings previously acquired is approximately $2.5 million.
6. Net percentages to be realized from the sale of computer equipment, furniture and fixtures, and vehicles are 20 percent, 15 percent, and 45 percent, respectively.
7. Any taxable gains triggered by the liquidation of the debtor's assets would be reduced to zero by the debtor's net operating loss carryforward, which exceeds $14 million.

12. INTANGIBLE ASSETS

.01 There is little doubt that much of the value found in today's companies is derived from intangible assets. According to valuation authors Gordon Smith and Russell Parr, "The most important assets possessed by successful companies are intangible, primarily represented by intellectual property. . . It is intellectual property that establishes markets, dominates industries, assures national security, captures the loyalty of customers, and allows the generation of superior profits."[34] With increasing frequency, business valuation practitioners are encountering intangible asset issues, and the bankruptcy arena is no exception. This section provides a brief overview of some of the basics associated with the valuation of intangible assets and is intended to provide a point of reference for the case study examples appearing in this Practice Aid.[35] A more detailed analysis regarding the valuation of intangible assets can be found in the AICPA Consulting Services Practice Aid 99-2, *Valuing Intellectual Property and Calculating Infringement Damages.*

Definition

.02 For valuation purposes, assets basically fall into three general categories: monetary, tangible, and intangible. Examples of monetary assets include working capital items such as cash and equivalents, accounts receivable, and inventory. Tangible assets are generally comprised of fixed capital assets. Therefore, intangible assets are those assets that are not considered monetary or tangible.

.03 Like tangible assets, intangible assets can be real (derive their value from land) or personal (not related to land). Real estate differs from real property. Real estate is associated with the tangible assets land, improvements, and buildings, whereas real property represents the legal rights associated with ownership of the tangible real estate. Because all legal rights are intangible, real property is intangible. Examples of real property ownership rights include the rights to use, sell, lease, or give away the real estate. Examples of intangible real property include leases, air rights, water rights, development rights, and easements.[36]

.04 When most people use the term intangible assets, they mean intangible personal property. Intangible personal property assets do not possess physical substance; therefore, their value isn't dependent on physical attributes. Intangible assets and intellectual property can be further differentiated by those that are created by the business from those that exist under protection of law. Intangible assets are often created by a business in the course of conducting its basic operations. For example, a customer list or assembled workforce is commonly found in most businesses. Whereas because of their special status, intellectual properties enjoy special legal protection and are usually registered under specific federal and state statutes. Common examples of intellectual property include patents, copyrights, trademarks, and trade secrets.[37]

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[34] Gordon V. Smith and Russell L. Parr, *Valuation of Intellectual Property and Intangible Assets* (New York: John Wiley & Sons, Inc., 1994, 2nd edition).
[35] Readers interested in a more complete discussion of the valuation of intangible assets should refer to the list of reference materials cited in the Appendix of this Practice Aid, as well as the list of authoritative and nonauthoritative literature listed at the beginning of this Practice Aid.
[36] Robert F. Reilly and Robert P. Schweihs, *Valuing Intangible Assets* (New York: McGraw-Hill, 1999).
[37] Ibid.

Intangible Assets Are Frequently Overlooked

.05 Although important, intangible assets are frequently overlooked, usually because they do not appear on a company's balance sheet. Further, when they do appear, they are carried at an amortized cost that is usually very different from their fair market value. Therefore, before the valuation process can begin, it is necessary to identify *all* of a company's assets. In order to do this properly, it is usually necessary to look beyond GAAP financial statements and obtain a thorough understanding of the business' operations. Essentially, this process is similar to the initial analysis conducted in business valuation. For example, determining what competitive advantages the company enjoys may lead to the realization that a company's trade secrets or supplier contracts provide significant cost savings in comparison to the competition, which in turn may lead to intangible assets to be valued.[38]

.06 It may also help to speak with nonfinancial managers, such as engineers, marketers, customer service representatives, and human resources personnel. Often, this process brings to light intangible assets that the Company itself did not realize existed. It can also be helpful to think about intangible assets in terms of income generation ability. For example, because customer lists are routinely rented or licensed, the customer list of a company in liquidation may have more value to a licensee than to the company that originated it.

Valuation of Intangible Assets Is Complex

.07 The valuation of intangible assets and intellectual property is a complex topic that is beyond the scope of this Practice Aid.[39] This is further complicated by the fact that some intangible assets cannot function except as part of a going-concern business enterprise, while others can be bought, sold, and licensed as independent properties. Practitioners lacking experience in this difficult area are encouraged to consider using the work of a specialist with specialized knowledge, training, and experience in intangible asset valuation. Readers may also consult the reference materials cited throughout this section for more information and guidance.

Intangible Asset Valuations in Bankruptcy

.08 The following are examples of the valuation of intangible assets in bankruptcy situations:[40]

- Allocation of reorganization value to a company's net assets.
- The purchase or sale of individual intangible assets (such as customer list, patents).
- The quantification of a secured creditor's collateral position.
- Valuation of intangible assets under Internal Revenue Code (IRC) section 108(b) cancellation of indebtedness income (income exclusion related to insolvent companies).

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[38] For additional information on this topic, see the discussion of SWOT analysis (strengths, weaknesses, opportunities, and threats) in "Assessing Unsystematic Risk," by Warren D. Miller, published in *CPA Expert*, Summer 1999.

[39] Readers interested in additional information concerning the valuation of intangible assets are directed to AICPA Consulting Services Practice Aid 99-2, *Valuing Intellectual Property and Calculating Infringement Damages*, and the list of reference materials cited in the Appendix of this Practice Aid.

[40] See other examples in chapter 10 of *Bankruptcy and Insolvency Accounting: Practice and Procedure*, by Grant W. Newton (New York: John Wiley, updated periodically).

- The need to enter into a licensing arrangement involving intellectual property.
- The need to value certain intangible assets in order to calculate the value of other intangible assets under a residual allocation method.

Premise

.09 Before the intangible assets in question can be valued, the valuator must make sure the adopted premise is appropriate under the circumstances. It is important to understand that the appropriate premise for valuing individual assets may differ from the one used to value the overall company. For example, under an orderly liquidation premise, an assembled workforce or goodwill is not usually valued. However, if the company's patents, customer list, and other intellectual property have value (for example, if they can be sold separately), they should be valued. The going-concern premise may be appropriate for valuing these assets, especially if the company's orderly liquidation period allows them to be exposed to their primary or secondary marketplace for a period of time sufficient to find a buyer willing to pay for the going concern income-producing ability of these assets.

Valuation Approaches

.10 Usually, all three general approaches to value, market, income, and asset-cost (see previous discussion in Section 7, "Valuation Approaches and Methods") should be considered in valuing a company's intangible assets. Of course, for each intangible asset, one or more of these approaches and their underlying methods will be more relevant than the others. However, all three approaches should be considered because each may result in a preliminary indication of the asset's value. It is later, in the valuation synthesis and conclusion process, that the valuator reconciles the different approaches and methods used, which result in the final conclusion of value about the subject asset.[41]

Income Approach

.11 This approach is based on the present value of the anticipated future economic benefit stream related to the ownership, use, or forbearance of the intangible asset. The income approach is generally adaptable to most categories or types of intangible assets and it is arguably the most frequently used approach in the valuation of intangible assets and related analyses.[42]

.12 ***Incremental Revenue and Cost Reduction.*** Economic income attributable to intangible assets generally occurs in two ways: incremental revenue and cost reduction. Either is equally acceptable as a basis for valuing intangible assets. A description of each follows:

1. *Incremental revenue.* This often occurs when the existence of intangible assets allows the asset owner to sell products for a higher selling price or to sell more units than would otherwise be possible. The presence of these assets may also allow the owner to introduce new products or develop new markets not previously possible.

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[41] Shannon P. Pratt, *Valuing Small Businesses & Professional Practices*, 3rd edition (New York: McGraw-Hill, 1998), page 743.
[42] See *Valuing Intangible Assets*, by Robert F. Reilly and Robert P. Schweihs, chapter 10.

2. *Cost reductions.* These may occur when certain intangible assets allow the asset owner (or renter or licensor) to incur lower costs than would otherwise be possible. Examples include: lower materials or scrap costs, avoided start-up or development costs, and lower data processing costs.

.13 ***Income Caveats.*** The following caveats should be kept in mind when using the income approach to value intangible assets.

- The remaining economic life of the intangible must be carefully considered in analyzing the future income-generating benefits associated with a particular intangible asset.
- One of the most difficult elements in the valuation of intangible assets under the income approach involves clearly assigning the economic income stream (whether incremental revenue or cost reductions) to the subject intangible asset. For example, in apportioning excess earnings (economic income) between a company's individual intellectual property assets, great care should be taken so that an asset with little incremental economic value is not attributed income pertaining to a different asset.

.14 ***Examples of Intangibles Commonly Valued by the Income Approach.*** These include customer-related intangibles such as customer lists and contract-related intangibles such as favorable supply contracts and favorable leases. Technology-related examples include patents, trademarks, and copyrights.

Asset-Cost Approach

.15 The cost approach attempts to measure the future benefits of ownership by quantifying the dollar amount that would be required to replace the future service capability of the subject intangible asset. The underlying assumption is that the cost to purchase or develop a new asset will approximate the economic value that the asset can provide during its life.

.16 In the valuation of intangible assets, cost can be either an historical amount or a current estimate. Historical cost relates to the actual cost to create or develop an intangible asset. Current estimates relate to cost to reproduce the intangible asset as of a certain date. In addition, the estimated cost may also be based on the costs avoided due to the existence of the intangible asset. There are two fundamental cost approach valuation methods: reproduction cost and replacement cost. Therefore, at the start of each cost valuation analysis, the valuator must first decide which type of cost will be estimated and which cost method will be used.[43]

.17 ***Reproduction Cost.*** This is the estimated cost to construct, at current prices, an exact duplicate intangible asset. Such a duplicate would be created using the same standards, design, layout, and so on as the original asset and, therefore, would suffer from the same defects/inadequacies and obsolescence as the original.[44]

.18 ***Replacement Cost.*** This represents the estimated cost to construct, at current prices, an intangible asset with equal functionality. Since the asset would be created using current standards

[43] Robert F. Reilly and Robert P. Schweihs, *Valuing Intangible Assets* (New York: McGraw-Hill, 1999).
[44] Ibid.

and state-of-the-art design and layout, it would exclude any functional or technological obsolescence that might be included in the subject asset.

.19 It should be noted that even though these two terms have different meanings, as defined above, the ultimate value conclusions derived from these two methods should not be materially different. This occurs because of allowable differences in adjustments made for obsolescence factors, that is, each method starts from a different base and then adjusts, as needed, for relevant obsolescence factors.

.20 Cost methods are most applicable to intangible valuation in the following situations:[45]

1. The subject intangible asset can be recreated or replaced.
2. The intangible asset is relatively new, or suffers from very little obsolescence, and the cost to create it is well documented.
3. When valuing special purpose or internally generated intangibles.
4. When guideline sales or license transactions are not available and the asset isn't income producing, thereby effectively leaving only the cost approach.

.21 ***Cost Caveats.*** It is important to keep in mind that cost relates more to the production or creation of an asset as opposed to the reflection of a market-based exchange amount. For this reason, none of the cost concepts assumes a marketplace or a transaction involving the intangible asset per se. Rather, cost describes what the original asset owner spent in creating the asset, or what the owner would have to spend as of a particular date to recreate the asset. Therefore, it is important to keep in mind that cost, by itself, does not tell how much a buyer would be willing to pay or a seller would require before agreeing to sell an asset.

.22 Examples of intangibles commonly valued by the asset-cost approach are as follows:

- Blueprints and technical drawings
- Chemical formulations and processes
- Computer software
- Technical libraries
- Training manuals
- Assembled workforce

Market Approach

.23 Most business valuation practitioners agree that whenever sufficient reliable transactional data are available, the market approach is the most direct method to use in valuation. However, they would also agree that finding relevant market-derived data, especially concerning intangible assets, could often be very difficult. Essentially, this approach estimates a market value by analyzing recent sales or licenses of similar intangible assets (guideline transactions) and then compares these transactions to the subject asset to be valued.

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[45] See Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs. *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*. 4th edition (New York: McGraw-Hill, 2000).

.24 This approach generally works best when the following factors are present:

- An active market with sufficient data available.
- Licensing agreements have been negotiated at arm's length.
- Royalty rates, as a percentage of revenues, have been established by licensing agreements or can be derived from the licensing agreements.

.25 ***Search for Guideline Transactions.*** In determining acceptable guideline asset sale or license transactions to compare to the subject intangible asset, the following types of factors should be considered:

- Expected remaining useful life of the guideline intangible asset.
- Date of the sale or license transaction.
- Terms and conditions of the sale or license (such as seller financing, earn-out agreement, and so on).
- Bundle of legal rights transferred in the guideline transaction.
- Expected return on investment to be earned by the guideline intangible asset.
- Market conditions at the time of the guideline sale.
- Presence of other unrelated assets in the guideline sale.

.26 ***Adjustments to Guideline Transactions.*** The types of factors outlined above are analyzed for each guideline intangible asset transaction. Based on the differences in the factors between the subject intangible asset and the guideline transactions, adjustments may need to be made to the guideline data found to make it comparable to the subject intangible asset. For example, if a seller was going out of business and needed cash quickly, the resulting guideline transaction price might be below market.

.27 ***Market Caveats.*** As previously mentioned, this approach works best when sufficient information is available. Therefore, if the subject intangible asset is truly unique or recent sales and exchanges are limited, this method may not prove useful. Other problems arise if the prospective comparable asset was part of a transaction involving other tangible or intangible assets. In this case, the valuation analyst must first establish that the transaction consideration regarding the subject asset represented arm's length pricing, and then he or she must properly allocate the transaction consideration between the assets.

.28 ***Examples of Intangibles Commonly Valued by the Market Approach.*** Licenses and permits often valued under this approach include liquor licenses, franchise agreements, and certificates of need. Real estate intangibles that lend themselves to this approach include leasehold interests, easements, and development rights. In financial institutions, the market approach may be used in valuing mortgage servicing rights, credit card portfolios and loan portfolios.

.29 ***Case Analysis.*** The following hypothetical example using information discussed in Section 10, "Case Study," illustrates the valuation of a trademark using the market approach, capitalized royalty income method.

.30 The Company's acquisitions in the Midwest included a large jobber, Premier Parts Distributors (Premier), which first began operations in 1950. In the 1970's, Premier developed a line of private label auto parts called Premier Parts™, which were manufactured under contract by independent manufacturers. Premier also registered its Premier Parts™ trademark and trade name in the United States Patent and Trademark Office. By 1998, this product line had attracted a following among local professional installers, and given its relatively long history and acceptance by its customers, Southeast Automotive periodically received inquiries concerning the availability of the Premier Parts™ trademark. After the petition was filed, the level of inquiries increased and the Company received several unsolicited offers to sell its Premier Parts™ trademark and trade name. As a result, the Company decided to have its interest in the trade name and trademark valued.

.31 The objective of the hypothetical example that follows is to estimate the fair market value of the Company's 100 percent ownership interest in the trademark and trade name, Premier Parts™, as of December 31, 2000. In this example, several assumptions have been made. We assume that the Premier Parts™ name will continue to be utilized in an uninterrupted fashion and that sales of the underlying parts will reach $2.0 million of net revenues in the coming year. For purposes of this analysis, we also assumed that the effective income tax rate is 38 percent, and the appropriate after-tax, market-derived capitalization rate is 21 percent. Further, based upon industry research and analysis, we have concluded that the appropriate market-derived royalty rate for this trademark is in the range of 5 percent to 5.5 percent of net revenues.

.32 For illustration purposes, Exhibit 11 presents a simplified valuation of the Premier trade name and trademark, using the market approach, and the capitalized royalty income method. Depending on the availability of needed data and the facts and circumstances of the valuation, normally all three approaches (cost, income, and market) would be considered in valuing a trademark or other intangible asset.[46]

13. REORGANIZATION VALUE AND PLAN CONFIRMATION VALUATION ISSUES

.01 In most instances, the most complex and challenging valuation issues that arise in the context of a bankruptcy relate to plan confirmation. Of particular importance is the assessment of the debtor's reorganization value. Accordingly, we have dedicated this section to the examination of issues the valuation analyst may encounter during the plan confirmation phase of a bankruptcy proceeding and to the review of techniques relative to the assessment of a debtor's reorganization value. While the examples reviewed in this section will provide some overview of general valuation techniques (so that bankruptcy valuation issues can be examined in the context of an overall valuation engagement), only those elements of the valuation process that are unique to a bankruptcy setting are discussed in detail.

.02 Some of the issues and techniques covered extend beyond the assessment of a debtor's reorganization value in that they likely have application to the valuation of any highly leveraged entity. Also, the issues covered in this section do not represent all unique issues that may be encountered when assessing a debtor's reorganization value, or the various techniques that may be employed to address the issues.

[46] For further information about trademark and intangible asset valuation, please refer to: Robert F. Reilly and Robert P. Schweihs, *Valuing Intangible Assets* (New York: McGraw-Hill, 1998).

Development of the Discount Rate

.03 In most bankruptcy reorganizations, the most useful reorganization value estimate is one that derives the total asset value (total invested capital) of the debtor as opposed to a value estimate that derives the value of the debtor's equity directly.[47] This is the case because claimants and holders of interests are negotiating over how much of the reorganized entity each will retain (either through the payment of cash, retention of debt, issuance of new debt, or issuance of an equity stake in the reorganized debtor). Accordingly, it may be more useful for claimants and holders of interests to know the value of the debtor's assets before negotiating their respective stake in the reorganized debtor.

.04 Of the three primary approaches to value (income approach, market approach, and asset-based approach), the income approach in general, and the discounted cash flow method in particular, is perhaps the valuation method best suited for calculating a debtor's reorganization value. Simply stated, the inherent appeal of the discounted cash flow method when calculating a debtor's reorganization value is that it can be tailored such that the unique attributes of the debtor and circumstances of the reorganization can be factored into the valuation. While the market approach may not be as inherently appealing as the discounted cash flow method for the reasons stated above, application of this method will generally provide useful insight from which some meaningful inference can be drawn. Some of the pitfalls associated with the application of a market approach in assessing a debtor's reorganization value are discussed in paragraphs .63 through .66 of this section.

.05 One of the most critical elements of the discounted cash flow method is the discount rate. As stated in paragraph .03, the most useful reorganization value estimate in most bankruptcy reorganizations is one that derives the total asset value of the debtor. If the value estimate is one that derives the total asset value of the debtor, the discount rate typically employed should reflect the risk inherent in the debtor's total invested capital, as opposed to the risk inherent in the debtor's equity capital.

.06 This section will examine issues relating to a discount rate that reflects the risk inherent in the debtor's overall cost of capital (as opposed to the debtor's cost of equity capital) for two primary reasons: first, because the reorganization value estimate to be employed is one that most likely derives the total asset value of the debtor, and second, because of the potential problems that may arise when employing the weighted average cost of capital (WACC) when assessing the reorganization value of a debtor. Situations may arise where the valuation analyst may want to derive the value of the reorganized debtor's equity or derive the reorganized debtor's total asset value by adding the value of interest-bearing debt to the value of the reorganized debtor's equity. While not typically employed, such an approach may be appropriate. In these situations, the valuation analysts must apply an equity discount rate.

.07 Numerous factors must be considered when developing an appropriate discount rate in any valuation engagement. However, when performing a valuation engagement in the context of a plan of reorganization, two important issues warrant careful consideration. Each of these issues is listed below and discussed in greater detail in the paragraphs that follow.

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[47] Within this section of the Practice Aid, reference to assets means total assets, as opposed to net assets. Valuing total assets is the same as valuing total invested capital. Referring to total assets references the left side of the balance sheet, while referring to total invested capital references the right side of the balance sheet. SOP 90-7, *Financial Reporting by Entities in Reorganization Under the Bankruptcy Code*, refers to this value as reorganization value.

1. Greater risk typically exists in effectuating a reorganization that requires significant restructuring of the debtor's operations than in effectuating a reorganization that is primarily financial in nature. The discount rate to be applied when assessing the reorganization value of a debtor that requires operational restructuring should reflect this increased level of risk.
2. The valuation analyst must exercise care when employing the WACC in situations where the debtor's capital structure is expected to change significantly, or the debtor has limited ability to utilize deductions for interest expense in the years incurred.

.08 ***Nature of Business Restructuring.*** Every business reorganization will possess elements of operational and financial restructuring—these two aspects of a business reorganization are not mutually exclusive. However, a business reorganization may fall toward either end of the spectrum, with operational restructuring at one end of the spectrum and financial restructuring at the other end. Accordingly, a business reorganization may be categorized as an "operational restructuring" or a "financial restructuring" depending on the degree to which operational or financial issues become the focal point of the reorganization. For purposes of this Practice Aid, we will assume that a financial restructuring represents a situation where, at the inception of the bankruptcy, the core operations of the debtor are viable and generate positive cash flow before debt service and taxes (hereinafter referred to as "positive cash flow from operations"), but the debtor has an excessive amount of debt in its capital structure. In other words, the debtor's operations, while viable, will not support the existing debt burden.

.09 On the other hand, we will assume that an operational restructuring represents a situation where, at the inception of the bankruptcy, the core operations of the debtor are failing and generate negative cash flow before debt service and taxes (hereinafter referred to as "negative cash flow from operations"). Obviously, a debtor that has negative cash flow from operations that wishes to successfully reorganize will have to restructure its debt. Nevertheless, in this scenario the greater uncertainty likely rests on whether the debtor will be able to restructure its operations. Accordingly, a financial restructuring is dominated by issues that relate to adjusting the debtor's capital structure and modifying the terms of debt instruments, and an operational restructuring is dominated by issues that relate to improving the debtor's operating performance.

.10 All other things being equal, the risk inherent in an operational restructuring is typically higher than the risk inherent in a financial restructuring. This higher level of risk in an operational restructuring is a result of many factors including, but not limited to, the following:

1. The complications associated with a debtor, who is currently experiencing negative cash flow from operations, obtaining the necessary concessions from creditors.
2. The uncertainty associated with the debtor's ability to develop and implement a business model that will enable the debtor to generate positive cash flow from operations by, among other things:
   a. Properly identifying and divesting unprofitable divisions, product lines, or customer segments.
   b. Increasing, or at a minimum stabilizing, revenues from retained business segments.
   c. Managing costs, working capital, and capital expenditures so that retained business segments can shed unnecessary cash outflows without cutting so deep that future prospects are impaired.

d. Offering incentives to retain and motivate its human capital in the face of negative past experiences and future uncertainty.
e. Properly managing other intangible assets so that the diminution of their value is minimized.

.11 While the increased risk of an operational restructuring is a function of many underlying factors, the ultimate manifestation of this greater level of risk lies in the large differences between actual preconfirmation cash flow from operations and estimated postconfirmation cash flow from operations.

.12 Another important consideration in assessing an appropriate discount rate to apply in a corporate reorganization is the nature of the debtor's assets. All other things being equal, less risk exists in a corporate reorganization where the debtor has a significant amount of tangible assets, such as a hotel chain or an entity that owns significant natural resources. Conversely, significantly greater risk exists in a corporate reorganization where the debtor has a significant amount of intangible assets, such as an entity that develops and licenses software.[48] (This issue is addressed by Richard A. Brealey and Stewart C. Myers in the context of the cost of financial distress in *Principles of Corporate Finance*, 6th edition.[49])

.13 Viewing the risk associated with business reorganizations on a continuum, a large, publicly traded company that has a significant amount of tangible assets and is undergoing a financial restructuring would lie toward the low-end of the risk continuum. Investments in such companies would tend to be viewed as having lower levels of unsystematic risk. On the other hand, a small, closely held company that has a significant amount of intangible assets and is undergoing an operational restructuring would lie toward the high-end of the risk continuum. Investments in such companies would tend to be viewed as having higher levels of unsystematic risk.

.14 When developing a discount rate in the context of a business reorganization, using such methods as the capital asset pricing model or the Fama-French three factor model is typically more applicable when assessing a debtor's reorganization value if the business reorganization lies at the low-end of the risk continuum. In these situations, the debtor's cost of equity capital is estimated using one of the methods mentioned above (or other methods that are typically employed). The debtor's cost of equity capital is then blended with the cost of other capital employed in the debtor's capital structure (for example, preferred stock and debt, including convertible securities) to derive an estimate for the debtor's opportunity cost of capital.[50] When an entity's opportunity cost of capital is adjusted to reflect its after-tax cost of debt, it is traditionally referred to as the WACC. It is beyond the scope of this Practice Aid to examine the techniques employed and resources available to calculate an entity's cost of equity capital and cost of debt capital. However, numerous resources are available (some of which are referenced in the Appendix of this Practice Aid) to assist the valuation analyst in developing an appropriate discount rate using more "traditional" methods.

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[48] While in most instances a significant amount of intangible assets equates to greater risk in the context of a corporate reorganization, it is typically acknowledged that a business reorganization is possible in situations where the debtor possesses a significant amount of intangible assets.

[49] Richard A. Brealy and Stewart C. Myers, *Principles of Corporate Finance*, 6th edition (Boston: Irwin/McGraw-Hill, 2000), pages 520-521.

[50] In this Practice Aid, the terms "opportunity cost of capital" and "required rates of return" are used interchangeably. The terms "discount rate" or "WACC" may reflect a different rate due to differences that may arise when utilizing the after-tax cost of debt.

.15 As business reorganizations move up the risk continuum, however, these more traditional methods will become increasingly inadequate in assessing the rate of return required to adequately compensate investors for the risk inherent in the business reorganization.

.16 At the high-end of the risk continuum in a business reorganization, the risk characteristics of investing in a small, closely held company that has a significant amount of intangible assets and is undergoing an operational restructuring can be similar in certain respects to investing in a start-up company. Two defining characteristics of many venture capital investments are: (a) the lack of tangible asset value (or collateral), and (b) the unproven track record of the entity seeking the investment coupled with the absence of historical financial performance that lends support to the future earning capacity of the business. Accordingly, a significant difference exists between the current level and trend of a start-up company's cash flow from operations and the projected level and trend of the company's cash flow from operations. An investment in an entity undergoing an operational restructuring may be marked by similar characteristics.[51] In fact, numerous funds have been raised for the purpose of investing in financially distressed businesses.

.17 While developing a discount rate in a business reorganization that lies at the high-end of the risk continuum is more subjective than the development of a discount rate using more traditional methods, some information exists that will assist the valuation analyst in framing his or her selection of a discount rate in light of empirical evidence. Perhaps the most extensive and rigorous survey of discount rates employed by venture capitalists at each stage of investment was conducted by QED Research, Inc., an economic and financial consulting firm located in Palo Alto, California. The results of the survey, among other things, are contained in a report entitled "QED Report on Venture Capital Financial Analysis" (the QED Report). Among other things the QED Report conveys the results of a survey among venture capitalists regarding the required rates of return at various stages of venture capital investment. The results range from a median required rate of return of 60 percent at the seed or start-up stage to a median of 30 percent at the initial public offering (IPO) or "cashout" stage.

.18 In addition to identifying the median and ranges for required rates of return at various stages of investment, the QED Report also discusses the characteristics that define each stage of investment. The defining characteristics for each investment stage may assist the valuation analyst in identifying a stage of investment from which the most meaningful inference can be drawn regarding a required rate of return for the reorganized debtor.

.19 The QED Report, which is the most extensive and rigorous survey of discount rates employed by venture capitalists we have identified, was issued in June 1987. While more recent surveys of, and references to, discount rates employed by venture capitalists don't provide as much detail and don't appear to have been conducted with the same rigor as the QED Report, they appear to indicate that the results of the QED Report are still valid.[52]

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[51] Two important differences between an entity undergoing an operational restructuring and a start-up company are that the former likely has an established market for its product or service and is generating revenue, while the latter, the start-up company, may have neither.

[52] For example, see *Entrepreneurial Finance*, by Janet Kiholm Smith and Richard L. Smith (New York: John Wiley & Sons, Inc., 2000); *Venture Capital: The Definitive Guide for Entrepreneurs, Investors, and Practitioners*, by Joel Cardis, Sam Kirschner, Stan Richelson, Jason Kirschner and Hildy Richelson (New York: John Wiley & Sons, Inc., 2001); and *Private Equity and Venture Capital: A Practical Guide For Investors and Practitioners*, by Rick Lake and Ronald A. Lake (London: Euromoney Books, 2000).

.20 Another resource that may help the valuation analyst develop a discount rate in a business reorganization that lies at the high-end of the risk continuum is the annual venture capital rate of return studies issued by Venture Economics. The studies, which are compiled from surveys of venture capital funds, reflect actual rates of return earned by the funds. The venture capital rate of return information, which can be located on the Venture Economics Web site at www.ventureeconomics.com, is categorized by fund type over investment horizons ranging from 3 months to 20 years.

.21 While the information contained in the Venture Economics study may provide a useful benchmark for discount rates applicable to a business reorganization, the rate of return calculations are geometrically linked and, according to some schools of thought, may not represent a forward-looking estimate of required rates of return. In addition, the rate of return data represents an aggregation of many investments and may not fully reflect the risk inherent in a particular investment. Nevertheless, the Venture Economics' study may provide some empirical evidence from which inference can be drawn regarding an appropriate discount rate in a business reorganization that lies at the high-end of the risk continuum.

.22 In most business reorganizations, the debtor does not lie at the low-end or the high-end of the risk continuum, but somewhere in between. Investments in such companies would tend to be viewed as having more moderate levels of unsystematic risk. In these instances, it is important to frame the estimate of the discount rate in the context of a "floor" required rate of return and a "ceiling" required rate of return established using the approaches referenced in this section. Furthermore, the valuation analyst should perform additional analyses to assess the level of unsystematic risk inherent in the subject company and to further substantiate a reasonable level for the discount rate within the established floor and ceiling required rates of return. While currently employed methods of assessing unsystematic risk tend to be more qualitative in nature, they represent an important element of the discount rate estimate in the context of a reorganization value assessment. It is beyond the scope of this Practice Aid to examine the techniques employed and resources available to assess unsystematic risk. However, we refer the reader to an article published in the October 2001 issue of *Shannon Pratt's Business Valuation Update* entitled "Unsystematic Risk & Size Effects on Valuations" by Donald W. Ickert for a listing of resources available on the subject of unsystematic risk.

.23 As a debtor emerges from bankruptcy and, over time, reaches milestones along the path toward profitability and long-term viability, the risk inherent in the debtor's operations decreases. Accordingly, an argument can be made that the discount rate employed when assessing a debtor's reorganization value should reflect higher risk in the early stages of the recovery than it does in the final recovery stages when the debtor has reached a stable level of risk. While this point is controversial and great divisiveness exists in the valuation community regarding the appropriateness of such a technique, we are aware of at least one academic who has referenced the application of this technique in the valuation of business interests. On his Web site, Damodaran Online (equity.stern.nyu.edu/~adamodar), Aswath Damodaran has posted a research paper that employs the use of a lower cost of equity capital as the investment characteristics of the subject company improve over time.

.24 It is important to remember that the filing of a bankruptcy petition can mitigate the risk associated with an operational restructuring because it provides the debtor relief from its creditors for the very purpose of allowing the debtor to focus on effectuating a successful reorganization. Accordingly, circumstances will exist in the context of an operational restructuring where a

discount rate developed using more traditional methods represents an appropriate measure of risk. This will generally be the case when the debtor has demonstrated during the bankruptcy that it can, has, and will continue to make operational improvements. In other circumstances, it may be appropriate to make slight or moderate upward adjustments to a discount rate developed using more traditional methods. These adjustments tend to be more subjective in nature and must be made after considering, and in relation to, relevant cost of capital benchmarks (for example, industry cost of capital estimates after adjusting for size differences, cost of capital estimates developed from a guideline group of companies, venture capital rates of return, and so on) and the facts and circumstances of the engagement.

.25 ***Use of the Weighted Average Cost of Capital (WACC) When Assessing a Debtor's Reorganization Value.*** When determining whether it is appropriate to use the WACC when assessing a debtor's reorganization value, the valuation analyst must consider two important questions. They are as follows:

1. Will the reorganized debtor maintain a constant capital structure?
2. Will the reorganized debtor fully utilize interest tax shields in the year incurred?

.26 If the answer to either of the above questions is "no," then the valuation analyst should either not employ the WACC in performing the valuation, or make adjustments to the WACC as they apply to the valuation of the reorganized debtor. The underlying problem lies in the fact that both of the items listed above are assumptions implicit in a WACC calculation; that is, the capital structure of the entity being valued will remain constant and the entity will fully utilize interest tax shields in the year incurred.

.27 In an effort to illustrate the assumptions listed above and the potential problems with employing a constant WACC in a reorganization value engagement, and to lay foundation for proposed solutions, we have prepared the numerical examples contained in Exhibits 12, 13, and 14. A number of simplifying assumptions have been made in an effort to isolate and highlight the impact of changes in certain variables.[53] The examples contained in the exhibits referenced above were not necessarily performed in the context of a business reorganization. This is because the purpose of the examples is to, among other things, highlight assumptions implicit in a WACC calculation. A valuation performed in the context of a business reorganization is contained in Section 11.

.28 Exhibit 12 summarizes the calculations of a direct valuation of the entity's equity capital (Scenario 1). Among other things, Scenario 1 assumes that the face and market value of the entity's debt are the same and, accordingly, the "coupon" payment on the debt is at a market rate. We have assumed that payments for debt service will include only interest payments. Accordingly, the amount of debt outstanding and the capital structure of the entity will remain constant over time. The cost of debt capital is assumed to be 9.0 percent. The cost of equity capital is assumed to be 18.0 percent.

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[53] In particular, we have assumed a constant capital structure, no growth in sales, constant expense levels, no working capital requirements (as a result of constant or flat revenues), capital expenditures that equal depreciation expense, perpetual life of the entity, and end-of-period discounting (as opposed to midperiod discounting).

.29 Based on the assumptions specified above, annual cash flow available to equity is \$2,400,000 (see row 14 of Exhibit 12) and the value of the entity's equity capital is \$13,333,333 (see row 15). The calculations summarized on rows 16 and 17 confirm that the market value of the debt is \$26,666,667 (discounted at 9.0 percent, the cost of debt capital). Row 18 reflects the sum of the cash flow amounts shown on rows 14 and 16, and row 19 shows that the combined value of the entity's equity capital (see row 15) and debt capital (see row 17), or the value of its assets, is \$40,000,000.

.30 Another method of performing the valuation under the same facts and circumstances is summarized in Exhibit 13. The ultimate determination of value is the same (see row 15), however, the mechanics of the derivation are different. Rather than performing a direct valuation of the entity's equity capital, as was illustrated in Exhibit 12, Exhibit 13 summarizes the calculations of a valuation of an entity's combined equity and debt capital, or total assets (Scenario 2). In particular, the Scenario 2 value estimate employs the entity's WACC in the calculation. Accordingly, the cash flow estimate ignores the deduction of interest expense and the impact of the interest expense deduction in determining the entity's income tax expense.[54]

.31 The reason for excluding the deduction of interest expense (see row 7 of Exhibit 13) in the cash flow estimate is because the WACC is a discount rate that reflects the risk inherent in the stream of cash that flows to the holders of both equity and debt securities. Accordingly, the cash flow stream to which the WACC is applied should reflect the cash that will flow to both holders of equity and debt securities. Since interest payments flow to the holders of the entity's debt securities, they are not subtracted in determining the cash flow stream to be discounted.[55]

.32 The reason for ignoring the tax impact of the interest expense deduction (compare row 10 of Exhibit 12 to row 10 of Exhibit 13) is because this element of value is embedded in the utilization of an entity's after-tax cost of debt (as opposed to its pretax cost of debt) in the derivation of its WACC. In other words, the enhancement to an entity's cash flow, which results from the tax deductibility of its interest expense (otherwise known as interest tax shields), is already embedded in the calculation of the entity's WACC. Considering the tax impact of the interest expense deduction in the calculation of cash flow when employing an entity's WACC in the value estimate would result in double counting of the tax benefit. This point is highlighted by the fact that cash flow to equity and debt is \$4,800,000 in Scenario 1 (see row 18 of Exhibit 12) and \$4,000,000 in Scenario 2 (see row 14 of Exhibit 13), yet the value estimates are the same. This is because the value attributable to the \$800,000 cash flow differential (which represents the tax

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[54] In the example at Exhibit 13, the entity's WACC is calculated as:

(cost of equity × % of equity in capital structure) + (cost of debt × [1 – tax rate] × % of debt in capital structure)

or

$(18.0\% \times 33.3\%) + (9.0\% \times [1 - 33.3\%] \times 67\%) = 10.0\%$

[55] The relevant cash flow stream is defined as:

	Operating profits before interest and income tax expense
Less:	Income tax expense (before consideration of the interest expense deduction)
Less:	Working capital requirements
Less:	Capital expenditures
Plus:	Noncash expenses

impact of the interest expense deduction) is already embedded in the calculation of the entity's WACC.

.33 One final example is necessary to finalize the illustration. Exhibit 14 summarizes the valuation of an entity's combined equity and debt capital, or total assets, which is performed in a less traditional manner (Scenario 3). The valuation results, however, are the same as the previous two scenarios. In particular, the Scenario 3 value estimate utilizes the pretax cost of debt, rather than the after-tax cost of debt, in the WACC calculation (resulting in a discount rate of 12.0 percent).[56] Employing the pretax cost of debt in an entity's WACC calculation is similar to employing the entity's unlevered cost of capital. Further justification for employing an entity's unlevered cost of capital in situations where financial leverage exists is contained in paragraphs .41 through .43.

.34 The result is a value estimate for the entity's equity and debt capital that is $33,333,333 (see row 15 of Exhibit 14), an amount that is $6,666,667 less than the value estimates provided by the previous two scenarios. The differential exists because the enhancement to the entity's cash flow and value, which results from the tax deductibility of its interest expense (otherwise known as interest tax shields), has not been considered. The solution to this problem lies in the inclusion of the incremental value attributable to the entity's interest tax shields. In the example at Exhibit 14, the amount of the annual interest tax shield is calculated as follows:

$$(\text{face value of debt} \times \text{coupon rate} \times \text{income tax rate})$$

or

$$(\$26{,}666{,}667 \times 9.0\% \times 33.3\%) = \$800{,}000$$

.35 Once the amount of the annual interest tax shield is calculated, this perpetual stream of tax savings is discounted at 12.0 percent (the entity's WACC when the pretax cost of debt is utilized in the calculation) to derive the present value of interest tax shields of $6,666,667 (see row 17 of Exhibit 14).[57] After properly including the value of the entity's interest tax shields, the estimated value of the entity's equity and debt is $40,000,000 (see row 18), the same value estimate derived under the previous two scenarios.[58]

.36 Under the Scenario 2 approach, which is the approach typically employed in practice, the value attributable to the $800,000 interest expense deduction (or interest tax shields) is not only embedded, but is also fixed in the calculation of the entity's WACC. Accordingly, if debt, and therefore interest expense, is reduced, the result is over-valuation of the interest tax shields because the cash flow in the model will not change due to the fact that interest expense and the

[56] When employing the pretax cost of debt rather than the after-tax cost of debt, the resulting figure is traditionally referred to as the opportunity cost of capital. For comparability purposes, we have continued to make reference to the WACC.

[57] Depending on the facts and circumstances, some finance academics discount the interest tax shields at the cost of debt, rather than the WACC (assuming the pretax cost of debt) or the opportunity cost of capital.

[58] Another important consideration is the value of the reorganized debtor's net operating loss (NOL). As discussed below, the debtor's ability to use its NOL will be restricted if the debtor has experienced a change in ownership (discussed in greater detail in paragraphs .46 through .53). Nevertheless, over time the NOL will be available to the debtor to reduce its income tax liability and, accordingly, some value should be assigned to it. A method of calculating the value of a debtor's NOL is demonstrated in Exhibit 6.

corresponding tax deduction is considered in the WACC calculation, not in the cash flow model itself (see row 7 of Exhibit 13).

.37 In light of the previous examples, it should be sufficiently clear that a WACC calculation assumes the following:

1. A constant capital structure
2. Full use of interest tax shields in the year incurred

Furthermore, it should be evident that if a valuation analyst utilizes a single or constant WACC, when it is anticipated that the proportion of debt employed in the entity's capital structuring will be reduced significantly over time, the result is an overstatement in the value of the entity's interest tax shields and, correspondingly, an overstatement in the value of the entity's total assets.

.38 It should also be evident that if the valuation analyst utilizes a single WACC that assumes one of the higher marginal tax rates (for example, a marginal, federal income tax rate of 34 percent) when it is anticipated that the reorganized debtor will have limited ability to use the interest expense deduction in the year incurred, due to the existence of net operating losses or thin profit margins in the early years of the reorganization, the result is an overstatement in the value of the entity's interest tax shields and, correspondingly, an overstatement in the value of the entity's total assets. This occurs because the tax impact of the interest expense deduction is overstated due to the fact that it is being discounted from a point in time prior to the period when the interest tax shields can actually be utilized to reduce the entity's tax bill.

.39 If the reorganized debtor will emerge from bankruptcy with a capital structure that can be expected to remain reasonably constant over time and if it will be able to use interest tax shields in the year incurred, then it may be appropriate to employ a WACC calculation in the reorganization value estimate. On the other hand, if it is anticipated that the capital structure of a reorganized debtor will not remain reasonably constant over time,[59] or that the debtor will be unable to fully use interest tax shields in the year incurred, the valuation analyst can employ several solutions to rectify the problem.

.40 One possible solution is to calculate a new WACC each year until the reorganized debtor's capital structure and its ability to use interest tax shields in the year incurred have reached a sustainable level (typically at the point in time when the terminal value calculation is performed). In particular, the WACC should be adjusted to reflect changes in the reorganized debtor's capital structure (due to the retirement or addition of interest-bearing debt) as well as changes in its effective tax rate (due to the inability to use interest tax shields in the year incurred). Adjusting betas for changes in capital structure will be an important aspect of this approach. While it is beyond the scope of this Practice Aid to examine techniques for adjusting betas for changes in capital structure, many of the reference materials identified in the Appendix of this Practice Aid will contain detailed information on this topic.

[59] In practice, companies do not maintain a perfectly constant capital structure and it is not possible for the valuation analyst to anticipate all changes in the subject company's capital structure when performing the valuation. However, the valuation analyst should capture significant, sustained, and anticipated changes in the subject company's capital structure in his or her value estimate.

.41 Another possible solution to the problem is to employ a technique called adjusted present value (APV) in the valuation process. It appears APV was introduced by Stewart C. Myers in March 1974.[60] The technique, stated in its most basic terms, is to value the entity assuming no financial leverage (no debt in the capital structure) and then adjust the entity's value for, among other things, the present value of tax shields and the costs of financial distress. Accordingly, the discount rate employed would be the debtor's unlevered cost of capital.

.42 The premise for starting with the value of the unlevered entity (assuming no debt in the capital structure) is based on the pioneering work of Franco Modigliani and Merton H. Miller (M&M). In 1958 M&M argued, under several simplifying assumptions, that an entity's opportunity cost of capital remains constant regardless of the amount of financial leverage the entity employs in its capital structure.[61,62] After 1958, M&M issued additional papers that relaxed some of the simplifying assumptions of the 1958 paper. The first assumption relaxed was the assumption that we live in a world with no taxes. In 1963, they issued a paper proposing that the value of an entity is the value of the entity assuming no leverage plus the present value of its interest tax shields. APV aligns closely with the proposition contained in M&M's 1963 paper. At least one recent empirical study[63] indicates the arguments made by M&M in 1958 and 1963 and the application of APV to highly leveraged entities has validity in practice.[64]

.43 It is important to clarify that reference to M&M's papers in the previous paragraph has not been made in the context of assessing an optimal capital structure. A strict application of M&M's 1963 paper would imply that the value of an entity is maximized at 100 percent debt financing. This is an unreasonable proposition and is rarely seen in practice. Other factors, such as the cost of financial distress and agency costs, must be considered when assessing an entity's optimal capital structure.[65] Instead, reference to M&M's papers, which have served as the foundation for subsequent treatises on the matter of optimal capital structure, and the Kaplan-Ruback study has been made in order to justify the use of an entity's unlevered cost of capital in a situation where financial leverage exists.

.44 The application of APV may represent an appropriate and efficient method of assessing a debtor's reorganization value. The numerical example contained in Exhibit 14 (Scenario 3) and the reorganization value estimate from the case analysis contained in Section 11 reflect simplified applications of APV. It is important to note that APV is most relevant for business reorganizations that lie toward the low end of the risk continuum and becomes less relevant as

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[60] S. C. Myers, Interactions of Corporate Financing and Investment Decisions—Implications for Capital Budgeting, *The Journal of Finance*, vol. XXIX (March 1974), pages 1-25.

[61] F. Modigliani and M. H. Miller, "The Cost of Capital, Corporate Finance and the Theory of Investment," *American Economic Review*, 48: 261-297 (June 1958).

[62] Some academics and practitioners argue that the overall cost of capital is not constant with changes in the degree of leverage. To the contrary, they argue that the overall cost of capital decreases with less leverage and increases with more leverage. Under this assumption, the impact of overvaluation resulting from the overstatement of the value of interest tax shields is at least partially mitigated by the assumption that the overall cost of capital has been reduced.

[63] S. N. Kaplan and R. S. Ruback. "The Valuation of Cash Flow Forecasts: An Empirical Analysis." *The Journal of Finance*. vol. L., no. 4 (September 1995), pages 1059-1093.

[64] The entities selected in the Kaplan and Ruback study were publicly traded corporations that were larger than the entities most valuation analysts would encounter in a reorganization value engagement. Accordingly, while the Kaplan and Ruback study provides evidence that APV has application in the valuation of large financially distressed businesses, it doesn't necessarily provide evidence that APV can be applied in the valuation of smaller entities.

[65] It is beyond the scope of this Practice Aid to examine factors and methodologies for assessing a firm's optimal capital structure. For a detailed discussion of optimal capital structure, see Richard A. Brealy and Stewart C. Myers. *Principles of Corporate Finance*, 6th edition (Boston: Irwin/McGraw-Hill, 2000).

business reorganizations move toward the high end of the risk continuum. An additional benefit of applying APV in the assessment of a debtor's reorganization value is that it provides an effective means of addressing the value of the reorganized debtor's NOL. (The application of APV is also addressed by Aswath Damodaran in his working paper entiled *Dealing with Distress in Valuation.*)

Normalization of Earnings[66] for the Reorganized Entity

.45 A number of considerations must be made when estimating the future earnings of the reorganized debtor. While the issues discussed below may arise in more traditional valuation engagements, they are more pronounced in a bankruptcy setting. The items discussed below represent only some of the more significant issues and, accordingly, do not represent a comprehensive list.

.46 ***Use of Net Operating Losses (NOLs).*** An interesting issue relating to the estimate of cash flow from operations that arises in a bankruptcy setting is the availability and use of NOL carryovers. In general, NOL carryovers may be utilized to reduce taxable income, thereby reducing income taxes and enhancing cash flow. However, in an effort to limit an entity's ability to acquire a loss corporation and utilize its NOL, Congress enacted IRC section 382. In particular, IRC section 382(a) limits the usage of an NOL if a loss corporation has experienced a "change of ownership."[67] The limitation introduced by section 382(a) restricts the amount of income against which a "prechange" NOL can be applied in any "postchange" taxable year to the product of the value of the loss corporation immediately before the ownership change and the "long-term tax-exempt rate."[68] Any net operating loss not used because of insufficient eligible taxable income in a given year is added to the IRC section 382(a) limitation of a subsequent year. In essence, the limitation enables the new owners to use NOL carryovers to offset an amount of income equal to a hypothetical stream of income that would have been realized had the loss corporation sold its assets at fair market value and reinvested the proceeds in high-grade, tax-exempt securities.

.47 The limitation introduced by IRC section 382(a) is applicable to all loss corporations unless the loss corporation is in a bankruptcy, receivership, or similar proceeding. In these situations, the provisions of IRC section 382(a) may no longer apply. Instead, the NOL of the loss corporation may be subject to the limitations imposed by IRC section 382(l)(5) or IRC section 382(l)(6).

.48 In general, the provisions of IRC section 382(l)(5) apply if the loss corporation has experienced an ownership change; is in a bankruptcy, receivership, or similar proceeding; and if certain shareholders and creditors retain at least 50 percent ownership of the stock. Rather than imposing an annual limitation, as does IRC section 382(a), IRC section 382(l)(5) requires the amount of the NOL to be reduced by certain interest deductions on debt that is being converted to stock as a result of the reorganization.[69] In addition, if the corporation experiences another

[66] The term "earnings" is used interchangeably with net income, free cash flow or whatever measure(s) of earnings are deemed appropriate for the valuation.

[67] In general, there is a change in ownership if, immediately after any owner shift involving a 5-percent shareholder or any equity shift, the percentage of the stock of the loss corporation owned by one or more 5-percent shareholders has increased by more than 50 percentage points over the lowest percentage of stock of the loss corporation (or any predecessor corporation) owned by such shareholders at any time during the three-year period ending on the day of any ownership change. For further discussion on changes in ownership refer to IRC section 382(g).

[68] In general, the long-term tax-exempt rate is the highest of the adjusted federal long-term rates in effect for any month in the three-calendar-month period ending with the calendar month in which the change date occurs.

[69] In particular, the NOL is reduced by interest deductions on converted debt taken for the portion of the taxable year on or before the date the ownership change occurs and for any taxable year ending during the three-year period preceding the taxable year in which the change occurred.

ownership change during the two-year period immediately following the ownership change, the IRC section 382(a) limitation with respect to the second ownership change is zero.

.49 Rather than being subject to the provisions of IRC section 382(l)(5), the debtor has the option to elect out of IRC section 382(l)(5) and adopt the provisions of IRC section 382(l)(6). In general, IRC section 382(l)(6) states that the pre-change NOL is limited in a manner similar to IRC section 382(a) with one primary exception—when calculating the value of the debtor's stock, the calculation is made after giving consideration for any surrender or cancellation of creditors' claims in the transaction that caused the change of ownership to occur. Section 382(l)(6) must also be adopted if certain shareholders and creditors do not retain at least 50 percent ownership of the stock.

.50 Because most acquisitions of a debtor's operations are effectuated in the form of an asset sale, IRC section 382 would not affect the valuation in most situations where an outright sale of the debtor's operations is contemplated. In limited situations, however, where the sale of the debtor's operations is effectuated as a stock sale, income taxes, and therefore the cash flow, of the debtor's operations in the hands of the new owner may be affected by the provisions of IRC section 382.

.51 The more likely scenario where IRC section 382 applies is in a reorganization where the shareholders of the debtor upon reorganization were creditors and shareholders of the debtor at the time the bankruptcy petition was filed. In this scenario, careful consideration must be given to the provisions of IRC section 382.

.52 In summary, the professionals associated with the bankruptcy proceeding must make three significant assessments that relate to the use of a loss corporation's NOL. Not only does the performance of the assessments require valuation related analyses, but also the results of the assessments affect the value of the debtor's operations in reorganization as well as an outright sale (assuming the sale is executed as a stock sale). The three significant assessments that must be made are as follows:

1. Has the loss corporation experienced a more than 50 percent change of the value of its stock within a three-year period (an ownership change)?
2. If the corporation is in bankruptcy, should it elect out of IRC section 382(l)(5) and be subject to the provisions of IRC section 382(l)(6)?
3. What is the value of the loss corporation at the time of the ownership change?

.53 The assessment of item 3 above may result in a circular calculation in that the annual limitations imposed on the usage of the NOL may depend upon the fair market value of the loss corporation, but the fair market value of the loss corporation may depend on the limitation imposed on the annual usage of the NOL. Accordingly, the assessment of item 3 and the ultimate value estimate may need to be calculated through an iterative process. Finally, as a practical matter, it may be simpler to calculate the value of the NOL separate from the value of the operations of the loss corporation. This is true not only in the application of the discounted cash flow method, but in the application of the capitalization of earnings and guideline company method as well. The flow chart in Exhibit 15 summarizes our analysis regarding the use of net operating losses.

.54 ***Tax on Cancellation of Debt (COD) Income.*** In many instances, the cancellation of debt can result in taxable events that generate sizeable levels of taxable income for the debtor. While careful tax planning can reduce the impact of such events, it is frequently necessary to recognize COD income in the context of a business reorganization. The valuation analyst must give careful consideration to the impact of COD income on the entity's NOL and estimated future tax bill. However, it is beyond the scope of this Practice Aid to provide further guidance on the subject of tax on COD income. For a detailed discussion of tax on COD income, see *Bankruptcy and Insolvency Taxation*, 2nd ed., by Grant Newton and Gilbert Bloom (New York: John Wiley & Sons, Inc., updated annually).

.55 ***The Costs of Financial Distress.*** As stated previously, the costs of financial distress tend to be lowest for entities with a significant amount of tangible asset value and highest for entities that possess little tangible asset value. Regardless of the level of costs, however, these costs are divided into two broad categories: direct costs and indirect costs. The direct costs of financial distress are primarily the fees paid by the debtor to accountants, attorneys, consultants, and other professionals relating to the administration of the bankruptcy estate. The direct costs of financial distress are relatively easy to measure.

.56 The indirect costs of financial distress, on the other hand, are difficult to measure. As an entity begins experiencing financial distress, the attention of company personnel is diverted from managing assets and analyzing investment decisions to battling with and appeasing claimants. This diversion of attention is manifest in reduced asset utilization, increased expenses, employee turnover, and lost business opportunities. The impact of these factors on the value of the debtor represents the indirect costs of financial distress.

.57 While the indirect costs of financial distress exist prior to bankruptcy, they may be exacerbated once the entity files for bankruptcy. This may occur for two primary reasons. First, the diversion of attention mentioned in the previous paragraph may be intensified. Second, the revenues of the entity may be impaired due to reluctance on the part of customers and suppliers to conduct business with an entity in bankruptcy.

.58 By the time the parties in a bankruptcy proceeding are seeking the approval of a plan of reorganization, most, if not all, of the costs of financial distress are reflected in the current operating performance of the debtor. In fact, if the bankruptcy proceeding is moving towards a successful reorganization of the debtor, many improvements in the debtor's operations may have already been implemented, thereby eliminating many of the costs of financial distress. Upon successful reorganization, the direct costs of financial distress are reduced and eventually eliminated. Accordingly, care must be given to eliminate bankruptcy administration costs that will not be incurred on a go-forward basis.

.59 While the reorganized entity may shed itself from the indirect costs of financial distress, they will not be eliminated as quickly as the direct costs. Accordingly, some of these costs may persist for many years subsequent to the approval of the plan of reorganization. It is always important for the valuation analyst to substantiate the value estimate based on the underlying economics. However, the need for underlying support is rarely more keen than it is in the context of a business reorganization. This is the case because, in many instances, estimated future performance may differ significantly from historical performance.

.60 ***Impact of Discontinued Operations and Non-Operating Assets.*** The plan of reorganization may specify the elimination and sale of noncore business operations and other non-operating assets. In addition, some of the debtor's operations may have been discontinued prior to the plan confirmation phase of the bankruptcy proceeding. Accordingly, a conscientious effort must be made to ensure that only those income and expense line items that relate to the operations of the reorganized debtor on a go-forward basis are included in the estimate of normalized earnings.

.61 ***Time Frame for the Cash Flow Estimates and Terminal Valuation Calculation.*** Given the fact that the value estimates typically assume perpetual life for the business interest being valued, it is generally necessary to integrate a terminal value calculation into the value estimate. In light of the simplifying assumptions implicit in a terminal value calculation and the numerous changes the reorganized debtor may experience subsequent to the adoption of the plan of reorganization (for example, changes in capital structure and improvements in operating performance), it is particularly important that the cash flow estimates be developed through, and the terminal value calculation be made at, a point in time when the debtor is anticipated to achieve some level of stability in, among other things, its capital structure and operating performance.

.62 ***Interest Income From Cash Balances.*** Due to the protection afforded the debtor as a result of the automatic stay, a significant balance of cash reserves may have been built up during the course of the bankruptcy. Upon reorganization, however, much of the excess cash may be used to fund the plan of reorganization. Accordingly, interest income must be adjusted to reflect the earnings on cash balances the debtor will retain upon reorganization.

Application of Market Approaches

.63 Utilization of market approaches (for example, the guideline public company method) in assessing a debtor's reorganization value can be problematic because of the numerous attributes of the guideline companies that are effectively embedded in market multiples.

.64 At the heart of the problem is finding guideline companies with operations, asset composition, and capital structure similar to the entity being valued. Some of the characteristics that are embedded in the multiples developed from the guideline companies are as follows:

- Underlying risk
- Asset utilization
- Earnings growth
- Capital expenditures in relation to depreciation and amortization
- The level of, and changes in, capital structure
- The level of, and the ability to use, tax shields

.65 A number of techniques are available to adjust for differences between the guideline companies and the company for which the value estimate is being derived. For example, properly calculating and applying multiples on a debt-free basis (for example, the application of sales, EBIT, and EBITDA multiples) will mitigate the impact different capital structures (as between the guideline companies and the subject company) can have on the value calculation. Also, the valuation analyst could develop adjustments to multiples based on observed differences in market multiples of healthy companies in relation to companies experiencing various levels of financial distress. The framework for the assessment can be developed by categorizing companies based on

their bond ratings. Some meaningful inference can be drawn even when examining the differences in multiples between the various categories within a distribution of companies that operate in a different industry than the subject company. (This issue is addressed by Aswath Damodaran in his working paper entitled *Dealing with Distress in Valuation.*) In addition, techniques have been developed to adjust multiples for differences in underlying risk (as measured by size or some other variable) and earnings growth.

.66 While some of the problems addressed above apply to more traditional valuation engagements, the problems are more severe when assessing a debtor's reorganization value. Application of a market approach is generally more meaningful if the assessment of a debtor's reorganization value relates to a restructuring that is primarily financial in nature. Whether or not meaningful inference can be drawn from a market approach will depend on the facts and circumstances of each reorganization value assignment.

Market Rate of Interest in "Cram Downs"

.67 A plan of reorganization may be confirmed even though a class of claims or interests does not accept the plan, as long as at least one impaired class of claims or interests has accepted the plan. The provision in the Bankruptcy Code that enables confirmation under this scenario is referred to as the "cram down" provision.

.68 In order to cram down a plan on a secured creditor, one of the following conditions must be met:

- The holder of the claim retains the lien(s) securing the claim. In addition, the holder of the claim receives deferred cash payments totaling at least the allowed amount of the claim, and a present value equal to or greater than the value of the collateral as of the effective date of the plan.
- The lien(s) securing the claim attaches to the proceeds generated from the sale of the collateral.
- The realization of the indubitable equivalent of such claim.

.69 Only the first item in the previous paragraph applies to the analysis of the market rate of interest. Specifically, the valuation analyst must determine an appropriate rate to apply when calculating the present value of the deferred cash payments in assessing whether the present value of these payments is greater than or equal to the value of the collateral as of the effective date of the plan.

.70 A debtor's ownership in real property represents a typical scenario where the assessment of a market rate of interest may arise. For example, assume that seven years ago the debtor acquired real property with a fair market value of $10,000,000. Further assume that a lender funded $7,000,000 of the purchase price (due to a 70 percent loan to value requirement) at an interest rate of 9.0 percent. Accordingly, the remaining amount of the purchase price would have been funded by a loan secured with a second mortgage or an equity infusion. Finally, assume that as of the effective date of the reorganization, the amount of the lender's claim is $6,000,000 (under the assumption that mortgage payments prior to the bankruptcy filing reduced the principal balance by $1,000,000) and the value of the collateral is $6,000,000. If a plan proponent wishes to "cram

down" a plan on the secured lender under the scenario that the secured lender will receive deferred payments, the proponent must make deferred payments that, when discounted to a present value, equal or exceed $6,000,000. The critical question under this scenario is, "What is the appropriate discount rate?"

.71 When the loan was made, the interest rate on the loan was 9.0 percent. However, at that time, the lender had a $3,000,000 equity cushion. If the plan proponent were successful in its efforts to cram down the plan, the lender would essentially be funding 100 percent of the value of the real estate. Under this scenario, the lender could make a good argument that the 9.0 percent interest rate negotiated at the time the loan was originated is not applicable to the scenario that would exist at plan confirmation. In general, the courts have agreed and have required that a market rate of interest, and not the interest rate originally contracted between the parties, be employed when calculating the present value of the deferred payments.

.72 Empirical data supporting the rate of return required by a single lender for funding 100 percent of a real property purchase is not readily available. Instead, real estate transactions are generally funded in traunches, with the most common traunches being a debt traunch and an equity traunch. Accordingly, perhaps the most empirical means of supporting a market rate of interest in a scenario similar to the one detailed above is to calculate a blended rate reflecting both the cost of debt and equity capital at ratios or levels that are traditionally maintained within a particular industry or for a given asset class.

Potential Discounts in Best Interest of Creditors Test

.73 An interesting valuation issue that may arise in assessing whether the "best interest of creditors" test has been met is the potential impact minority interest discounts and marketability discounts applicable to minority interests may have on the test. It is important to note that the test is applied on an individual claimant basis, not to the class as a whole. Accordingly, if an individual creditor receives a minority interest in the debtor as satisfaction of its claim, it is important for purposes of applying the test that the liquidation value of the debtor be compared to the value of a nonmarketable, minority interest in the debtor. Simply allocating the asset value of the debtor on a pro rata basis to individual claimants when applying the best interest of creditors test is not appropriate. The need to apply a minority interest discount and a marketability discount applicable to a minority interest depends upon the manner in which the value estimate is derived.

.74 In most instances when reorganization is a meaningful alternative, it is not difficult to demonstrate that the holder of a claim or interest receives more value in reorganization than in liquidation. However, it is possible that a claimant receiving a minority interest in a debtor with a significant amount of hard asset value (for example, marketable securities, real estate, or natural resources) may receive greater value in liquidation (thereby tapping directly into the value of the debtor's underlying assets) than in receiving a minority interest in the debtor.

14. CONCLUSION

.01 The premise of this Practice Aid is to serve as a basic primer providing practitioners with guidance involving valuations performed in the bankruptcy and distressed companies arena. It is not intended to be a complete or comprehensive publication; however, it does provide practitioners with pertinent information on certain valuation issues that may need to be addressed while valuing bankrupt and distressed companies.

EXHIBIT 1

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Consolidated Schedule of Assets

Description	Fiscal Year 1998	Fiscal Year 1999	Fiscal Year 2000
CURRENT ASSETS			
Cash	$ 1,610,000	$ 1,007,000	$ 1,014,000
Accounts receivable, less allowances (1999–$125,000; 1998–$150,000) for doubtful accounts	13,842,000	11,160,000	10,775,000
Refundable income taxes	427,000	—	—
Inventories—lower of cost (FIFO method) or market	36,695,000	28,587,000	27,384,000
Receivable due on sale of subsidiaries' assets	—	1,932,000	1,559,000
Prepaid expenses	890,000	670,000	571,000
TOTAL CURRENT ASSETS	53,464,000	43,356,000	41,303,000
OTHER ASSETS			
Excess of purchase price over net assets acquired	2,260,000	2,200,000	1,689,000
Other assets	587,000	170,000	159,000
TOTAL OTHER ASSETS	2,847,000	2,370,000	1,848,000
PROPERTY AND EQUIPMENT			
Land and buildings	733,000	659,000	626,000
Buildings under capitalized leases	3,680,000	3,222,000	3,060,000
Leasehold improvements	1,922,000	1,640,000	1,558,000
Computer equipment	2,111,000	1,810,000	1,719,000
Furniture and fixtures	3,592,000	3,143,000	2,986,000
Vehicles	2,525,000	2,183,000	2,074,000
	14,563,000	12,657,000	12,023,000
Less—allowances for depreciation and amortization	8,282,000	6,961,000	7,214,000
NET PROPERTY AND EQUIPMENT	6,281,000	5,696,000	4,809,000
TOTAL ASSETS	**$62,592,000**	**$51,422,000**	**$47,960,000**

EXHIBIT 2

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Consolidated Schedule of Liabilities and Stockholders' Equity

Description	Fiscal Year 1998	Fiscal Year 1999	Fiscal Year 2000	Notes
CURRENT LIABILITIES				
Trade accounts payable and accrued expenses	$15,355,000	$16,086,000	$ 2,036,000	
Dividends payable	14,000	71,000	0	
Salaries, wages, and commissions	828,000	755,000	639,000	
Taxes, other than income	1,017,000	534,000	391,000	
Income taxes—current	—	—	—	
Current portion of long-term debt and capital lease obligation	1,240,000	9,654,000	—	
Obligations under credit facility	21,451,000	21,241,000	—	1
Obligation under DIP financing agreement	—	—	20,713,000	
Subordinated debt (Jones acquisition)	—	3,295,000	—	
TOTAL CURRENT LIABILITIES	39,905,000	51,636,000	23,779,000	
LIABILITIES SUBJECT TO COMPROMISE	—	—	35,566,000	2
LONG-TERM LIABILITIES				
Long-term debt, less current portion	6,445,000	—	—	
Capital lease obligations	3,522,000	—	—	
Pension	5,000,000	5,000,000	—	
Subordinated debt (Jones acquisition)	3,170,000	—	—	
TOTAL LONG-TERM LIABILITIES	18,137,000	5,000,000	—	
STOCKHOLDERS' EQUITY				
Preferred stock (serial), par value $1,000—authorized 50,000 shares; issued and outstanding—3,631 shares (callable and liquidation value: $363,100)	11,000	11,000	11,000	
Common stock, par value 10 cents—authorized 3,000,000 shares; issued and outstanding—1,222,388 shares	381,000	381,000	381,000	
Additional paid-in capital	3,317,000	3,317,000	3,317,000	
Retained earnings (deficit)	841,000	(8,923,000)	(15,094,000)	
TOTAL STOCKHOLDERS' EQUITY	4,550,000	(5,214,000)	(11,385,000)	
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$62,592,000**	**$51,422,000**	**$47,960,000**	

Notes

1 The line of credit is secured with a first lien in inventories and receivables.

2 Liabilities subject to compromise consist of: Long-term secured debt—$3,370,000, obligations under credit facility—$1,983,000, trade payables and other unsecured claims—$14,250,000, long-term unsecured debt—$6,540,000, preferred dividends payable—$128,000, unfunded pension obligations—$6,000,000, and subordinated debt $3,295,000.

EXHIBIT 3

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Consolidated Statement of Operations

Description	Fiscal Year 1997	Fiscal Year 1998	Fiscal Year 1999	Fiscal Year 2000
NET SALES	$123,239,000	$ 113,275,000	$ 102,906,000	$ 97,967,000
COST OF GOODS SOLD	70,651,000	67,884,000	63,537,000	59,172,000
GROSS PROFIT	52,588,000	45,391,000	39,369,000	38,795,000
SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES	47,334,000	46,638,000	43,924,000	40,111,000
OPERATING PROFIT	5,254,000	(1,247,000)	(4,555,000)	(1,316,000)
OTHER INCOME/(EXPENSE)				
Interest expense	(3,192,000)	(3,309,000)	(3,282,000)	(2,063,000)
Other income/(expense)	747,000	463,000	383,000	588,000
Provision for loss on disposal of subsidiary assets, including $750,000 loss from operations during the phase-out period	—	—	(2,484,000)	(987,000)
Gain on sale of net assets of certain subsidiaries	—	—	174,000	483,000
Unfunded pension expense	—	—	—	(1,000,000)
Bankruptcy administrative expense	n/a	n/a	n/a	(1,876,000)
TOTAL OTHER INCOME/(EXPENSE)	(2,445,000)	(2,846,000)	(5,209,000)	(4,855,000)
PROFIT BEFORE TAXES	2,809,000	(4,093,000)	(9,764,000)	(6,171,000)
INCOME TAX EXPENSE/(BENEFIT)	1,043,000	(1,068,000)	—	—
NET INCOME/(LOSS)	**$ 1,766,000**	**$ (3,025,000)**	**$ (9,764,000)**	**$ (6,171,000)**

SALES GROWTH AND PERCENT OF SALES ANALYSIS

Annual sales growth	n/a	–8.1%	–9.2%	–4.8%
Cost of goods sold as a percent of sales	57.3%	59.9%	61.7%	60.4%
SG&A as a percent of sales	38.4%	41.2%	42.7%	40.9%
Other expense/(income) as a percent of sales	0.6%	0.4%	0.4%	0.6%
Income tax rate	37.1%	26.1%	0.0%	0.0%

EXHIBIT 4

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Consolidated Statements of Stockholders' Equity

Description	Preferred Stock	Common Stock	Additional Paid-In Capital	Retained Earnings (Deficit)	Total
BALANCE AT DECEMBER 31, 1996	$11,000	$381,000	$3,317,000	$ 2,214,000	$ 5,923,000
Net income	—	—	—	1,766,000	—
Preferred stock dividends	—	—	—	(57,000)	—
BALANCE AT DECEMBER 31, 1997	11,000	381,000	3,317,000	3,923,000	7,632,000
Net income	—	—	—	(3,025,000)	—
Preferred stock dividends	—	—	—	(57,000)	—
BALANCE AT DECEMBER 31, 1998	11,000	381,000	3,317,000	841,000	4,550,000
Net income	—	—	—	(9,764,000)	—
Preferred stock dividends	—	—	—	—	—
BALANCE AT DECEMBER 31, 1999	11,000	381,000	3,317,000	(8,923,000)	(5,214,000)
Net income	—	—	—	(6,171,000)	—
Preferred stock dividends	—	—	—	—	—
BALANCE AT DECEMBER 31, 2000	$11,000	$381,000	$3,317,000	$(15,094,000)	$(11,385,000)

EXHIBIT 5

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Cash Flow Estimate and Valuation

	Description	Fiscal Year 2001	Fiscal Year 2002	Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005	Fiscal Year 2006
(1)	**NET SALES**	$107,764,000	$123,929,000	$148,715,000	$163,587,000	$171,766,000	
(2)	**COST OF GOODS SOLD**	64,551,000	74,233,000	87,593,000	94,717,000	97,735,000	
(3)	**GROSS PROFIT**	43,213,000	49,696,000	61,122,000	68,870,000	74,031,000	
(4)	**SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES**	41,489,000	46,473,000	55,025,000	59,709,000	61,836,000	
(5)	**OPERATING PROFIT**	1,724,000	3,223,000	6,097,000	9,161,000	12,195,000	
	OTHER INCOME/(EXPENSE)						
(6)	Interest expense	n/a	n/a	n/a	n/a	n/a	
(7)	Other income/(expense)	754,000	744,000	1,190,000	1,309,000	1,374,000	
(8)	Provision for loss on disposal of subsidiary assets, including $750,000 loss from operations during the phase-out period	—	—	—	—	—	
(9)	Gain on sale of net assets of certain subsidiaries	—	—	—	—	—	
(10)	Bankruptcy administrative expense	(300,000)	—	—	—	—	
(11)	**TOTAL OTHER INCOME/(EXPENSE)**	454,000	744,000	1,190,000	1,309,000	1,374,000	
(12)	**PROFIT BEFORE TAXES**	2,178,000	3,967,000	7,287,000	10,470,000	13,569,000	
(13)	**INCOME TAX EXPENSE/(BENEFIT)**	812,394	1,479,691	2,718,051	3,905,310	5,061,237	
(14)	**NET INCOME/(LOSS)**	**$ 1,366,000**	**$ 2,487,000**	**$ 4,569,000**	**$ 6,565,000**	**$ 8,508,000**	
(15)	Working capital requirements	$ (784,000)	$ (1,293,000)	$ (1,983,000)	$ (1,190,000)	$ (654,000)	
(16)	Capital expenditures less depreciation	250,000	250,000	(275,000)	(275,000)	—	
(17)	**FREE CASH FLOW**	**$ 1,365,606**	**$ 1,444,000**	**$ 2,311,000**	**$ 5,100,000**	**$ 7,854,000**	**8,246,700**
(18)	**TERMINAL VALUE**	n/a	n/a	n/a	n/a	n/a	63,436,154
(19)	**DISCOUNTED AMOUNTS**	$ 1,257,142	$ 1,126,534	$ 1,527,900	$ 2,857,480	$ 3,729,253	30,120,891
(20)	**ESTIMATED VALUE EXCLUDING INTEREST TAX SHIELDS (SUM OF DISCOUNTED AMOUNTS)**						40,619,199
(21)	**ESTIMATED VALUE OF TAX SHIELDS**						7,220,126
(22)	**ESTIMATED VALUE**						**$47,839,326**

Assumptions:

	2001	2002	2003	2004	2005	2006
Annual sales growth	10.0%	15.0%	20.0%	10.0%	5.0%	
Cost of goods sold as a percent of sales	59.9%	59.9%	58.9%	57.9%	56.9%	
SG&A as a percent of sales	38.5%	37.5%	37.0%	36.5%	36.0%	
Other expense/(income) as a percent of sales	0.7%	0.6%	0.8%	0.8%	0.8%	
Income tax rate	37.3%	37.3%	37.3%	37.3%	37.3%	
Working capital requirements as a % of the change in sales	8.0%	8.0%	8.0%	8.0%	8.0%	
Capital expenditures less depreciation	$250,000	$250,000	($275,000)	($275,000)	$ 0	
Discount rate	18.0%	18.0%	18.0%	18.0%	18.0%	
Discount period for annual free cash flow	0.5	1.5	2.5	3.5	4.5	
Discount period for terminal value						4.5
Long-term earnings growth rate						5.0%

EXHIBIT 6

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Value Estimate for Tax Shields

						Annual Use of Net Operating Loss Calculation				
Period	Annual Amount	Tax Impact	Terminal Amount	Present Value of Tax Impact	Assumed Level of Debt (Note 1)	Beginning NOL Balance	NOL Available for Use During Period	NOL Used During Period	NOL Not Used in Current Period	Ending NOL Balance
	Use of NOL									
1	—	—	n/a	—	n/a	$15,935,000	$ 936,000	—	$936,000	$15,935,000
2	$1,519,600	$566,811	n/a	$407,075	n/a	15,935,000	1,872,000	$1,519,600	352,400	14,415,400
3	1,288,400	480,573	n/a	292,492	n/a	14,415,400	1,288,400	1,288,400	—	13,127,000
4	936,000	349,128	n/a	180,076	n/a	13,127,000	936,000	936,000	—	12,191,000
5	936,000	349,128	n/a	152,607	n/a	12,191,000	936,000	936,000	—	11,255,000
6	936,000	349,128	n/a	129,328	n/a	11,255,000	936,000	936,000	—	10,319,000
7	936,000	349,128	n/a	109,600	n/a	10,319,000	936,000	936,000	—	9,383,000
8	936,000	349,128	n/a	92,881	n/a	9,383,000	936,000	936,000	—	8,447,000
9	936,000	349,128	n/a	78,713	n/a	8,447,000	936,000	936,000	—	7,511,000
10	936,000	349,128	n/a	66,706	n/a	7,511,000	936,000	936,000	—	6,575,000
11	936,000	349,128	n/a	56,530	n/a	6,575,000	936,000	936,000	—	5,639,000
12	936,000	349,128	n/a	47,907	n/a	5,639,000	936,000	936,000	—	4,703,000
13	936,000	349,128	n/a	40,599	n/a	4,703,000	936,000	936,000	—	3,767,000
14	936,000	349,128	n/a	34,406	n/a	3,767,000	936,000	936,000	—	2,831,000
15	936,000	349,128	n/a	29,158	n/a	2,831,000	936,000	936,000	—	1,895,000
16	936,000	349,128	n/a	24,710	n/a	1,895,000	936,000	936,000	—	959,000
17	936,000	349,128	n/a	20,941	n/a	959,000	936,000	936,000	—	23,000
18	23,000	8,579	n/a	436	n/a	23,000	23,000	23,000	—	—
Estimated Value of NOL				$1,764,166						
	Interest Expense Deduction									
1	$2,447,400	$912,880	n/a	$ 773,627	$24,474,000	n/a	n/a	n/a	n/a	n/a
2	2,447,400	912,880	n/a	655,616	24,474,000	n/a	n/a	n/a	n/a	n/a
3	2,447,400	912,880	n/a	555,607	24,474,000	n/a	n/a	n/a	n/a	n/a
4	2,447,400	912,880	n/a	470,853	24,474,000	n/a	n/a	n/a	n/a	n/a
5	2,447,400	912,880	n/a	399,028	24,474,000	n/a	n/a	n/a	n/a	n/a
6	2,447,400	912,880	$7,022,155	2,601,228	24,474,000	n/a	n/a	n/a	n/a	n/a
Estimated Value of Interest Expense Deduction				$5,455,960						
Estimated Value of Interest Tax Shields				$7,220,126						

Assumptions

Amount of NOL (Note 2)	$15,935,000
Interest rate on new debt	10.0%
Estimated value of stock (Note 3)	$23,400,000
Federal rate	4.0%
Annual use of NOL	$ 936,000
Tax rate	37.3%
Discount rate	18.0%
Long-term growth rate	5.0%

Notes

1. In order to simplify the example, the level of debt is assumed to remain constant at $24,474,000 (the amount of the new debt identified in Exhibit 7) for the first six periods, resulting in a projected changing capital structure (a constant level of debt with an increase in the market value of equity over time). Subsequent to the sixth period, the level of debt is assumed to increase at 5.0% per year.
2. The amount of the NOL is assumed to be equal to the combined net loss for the 1999 and 2000 fiscal years.
3. The estimated value of stock is calculated by subtracting $24,474,000, the amount of the new debt identified in Exhibit 7, from $47,839,326, the Company's estimated reorganization value (see row 22 of Exhibit 5).

EXHIBIT 7

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Proposed Cash Distribution, Issuance of New Debt, and Stock Ownership at Confirmation

Description	Amount of Claim	Cash	New Debt	Stock Ownership Percentage	Dollar Recovery	Percentage Recovery	Notes
DIP lender	$20,713,000	—	$20,713,000	0.0%	$20,713,000	100.0%	
Secured long-term debt	3,370,000	—	3,370,000	0.0%	3,370,000	100.0%	
Administrative costs	670,000	$670,000	—	0.0%	670,000	100.0%	
Prepetition tax claim	391,000	—	391,000	0.0%	391,000	100.0%	1
Obligations under credit facility	1,983,000	—	—	8.5%	1,989,000	100.3%	
Trade accounts payable, accrued expenses, pension, and unsecured long-term debt	26,790,000	—	—	88.5%	20,709,000	77.3%	
Subordinated debt (Jones acquisition)	3,295,000	—	—	3.0%	702,000	21.3%	
Preferred stockholders	—	—	—	0.0%	—	0.0%	
Common stockholders	—	—	—	0.0%	—	0.0%	
Total	**$57,212,000**	**$670,000**	**$24,474,000**	**100.0%**	**$48,544,000**		

Notes

1 Prepetition tax claims willl receive a note that will be paid off over six years bearing interest at a market rate.

EXHIBIT 8

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Assets—Hypothetical Liquidation Analysis
December 31, 2000

Description	Book Values	Liquidation Values
CURRENT ASSETS		
Cash	$ 1,014,000	$ 1,014,000
Accounts receivable, less allowances of $125,000 for doubtful accounts	10,775,000	8,512,000
Refundable income taxes	—	—
Inventories—lower of cost (FIFO method) or market	27,384,000	13,144,000
Receivable due on sale of subsidiaries' assets	1,559,000	1,481,000
Prepaid expenses	571,000	—
TOTAL CURRENT ASSETS	41,303,000	24,151,000
OTHER ASSETS		
Excess of purchase price over net assets acquired	1,689,000	—
Other accounts	159,000	—
Trademarks/trade names	—	310,000
Operating leases below market	—	2,000,000
TOTAL OTHER ASSETS	1,848,000	2,310,000
PROPERTY AND EQUIPMENT		
Land and buildings	626,000	2,500,000
Buildings under capitalized leases	3,060,000	Included above
Leasehold improvements	1,558,000	—
Computer equipment	1,719,000	344,000
Furniture and fixtures	2,986,000	448,000
Vehicles	2,074,000	933,000
	12,023,000	4,225,000
Less—allowances for depreciation and amortization	7,214,000	—
NET PROPERTY AND EQUIPMENT	4,809,000	4,225,000
TOTAL ASSETS	**$47,960,000**	**$30,686,000**

EXHIBIT 9

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Liabilities—Hypothetical Liquidation Analysis
December 31, 2000

Description	Book Values	Liquidation Values
LIABILITIES NOT SUBJECT TO COMPROMISE		
Taxes, other than income (prepetition)	$ 391,000	$ 391,000
Accounts payable (post petition)	2,036,000	2,036,000
Salaries, wages, and commissions	639,000	639,000
Obligations under DIP financing agreement	20,713,000	20,713,000
LIABILITIES SUBJECT TO COMPROMISE		
Long-term debt (secured)	3,370,000	3,370,000
Obligations under credit facility	1,983,000	1,983,000
Trade payables and other unsecured claims	14,250,000	14,250,000
Capital lease obligations	—	—
Long-term debt (unsecured)	6,540,000	6,540,000
Pension	6,000,000	6,000,000
Dividends payable	128,000	128,000
Subordinated debt (Jones acquisition)	3,295,000	3,295,000
TOTAL LIABILITIES	59,345,000	59,345,000
STOCKHOLDERS' EQUITY		
Preferred stock (serial), par value $1,000—authorized 50,000 shares; issued and outstanding—3,631 shares (callable and liquidation value: $363,100)	11,000	—
Common stock, par value 10 cents—authorized 3,000,000 shares; issued and outstanding—1,222,388 shares	381,000	—
Additional paid-in capital	3,317,000	—
Retained earnings (deficit)	(15,094,000)	—
TOTAL STOCKHOLDERS' EQUITY	(11,385,000)	—
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$ 47,960,000**	**$59,345,000**

EXHIBIT 10

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Net Recovery—Hypothetical Liquidation Analysis
December 31, 2000

	Estimated Claim Amount	Amount	Percentage Recovery
Net Liquidation Proceeds (1)		**$29,572,000**	
Add: Recoveries for preference actions, other (2)		1,300,000	
Total Liquidation Proceeds & Recoveries		30,872,000	
Less: DIP financing amount (3)	$20,713,000	20,713,000	100.0%
Less: Secured long-term debt (4)	3,370,000	3,370,000	100.0%
Less: Chapter 7 administrative costs (5)	1,867,000	1,867,000	100.0%
Less: Net overhead during selling periods (6)	786,000	786,000	100.0%
Less: Priority unsecured claims (7)	3,066,000	3,066,000	100.0%
Less: Non-priority unsecured claims (8) and subordinated debentures	32,068,000	1,070,000	3.3%
Less: Dividends payable (9)	128,000	—	0.0%
Liquidation Proceeds Remaining		**$ 0**	

Liquidation Proceeds Available to Unsecured Long-Term Debt and Debenture Holders:			
Distribution to Holders of Unsecured Long-Term Debt	**$6,540,000**	**$216,000**	**3.3%**
Distribution to Holders of Subordinated Debentures	**$3,295,000**	**$109,000**	**3.3%**

Notes:

(1) Includes assumed total gross proceeds from the sale of the Company's operations would be $30,686,000 (see Exhibit 8), which would be reduced by a 2 percent sales commission and approximately $500,000 in retention pay for key personnel and severance pay to terminated employees. The net anticipated proceeds is $29,572,000.

(2) Assumed proceeds from voidable preferences and other recoveries made by the estate are $1,300,000. Total proceeds from asset liquidation and recoveries: $30,872,000.

(3) DIP financing, $20.7 million, represents DIP debt balance at December 31, 2000.

(4) Secured long-term debt of $3.4 million, represents debt secured by fixed assets as of December 31, 2000 with a value after adjustment equal to the amount of the secured claim.

(5) Chapter 7 administration costs are assumed to include Trustee fees of $921,000, 3% of the gross proceeds collected from the liquidation of the assets. Other professional fees for the Trustee's professionals and unsecured creditors committees are estimated at $946,000. The total anticipated amount is $1,867,000.

(6) Overhead during the selling period is the estimated net wind-down expenses during the six-month liquidation period, $786,000.

(7) Priority unsecured claims represent taxes (other than income), post-petition accounts payable, and pre- and post-petition salaries and wages payable, totaling $3,066,000.

(8) Non-priority unsecured claims of approximately $32.1 million are comprised of unsecured trade debt, unsecured long-term debt, unfunded pension, obligations under credit facility and subordinated debt. Under this liquidation scenario, the projected distribution to this class would be approximately 3.3 percent.

(9) No distribution is assumed to holders of $128,000 in dividends payable.

EXHIBIT 11

SOUTHEAST AUTOMOTIVE WAREHOUSE, INC.
Trademark Valuation—Capitalized Royalty Income Method
As of December 31, 2000

Description of Variables	Projected Next Year	
Projected Premier Parts Distributors net revenue	$2,000,000	$2,000,000
Market-derived range of applicable royalty rates	5.0%	5.5%
Projected annual royalties	100,000	110,000
Less: income tax expense	38,000	41,800
Projected after-tax royalties	62,000	68,200
Divided by: market-derived capitalization rate	21.0%	21.0%
Indicated Trademark Value	295,238	324,762
Indicated Fair Market Value (rounded)	**$ 310,000**	

EXHIBIT 12

Value Estimate of ABC Company

Scenario 1

	Description	Fiscal Year 2001	Fiscal Year 2002	Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005
(1)	**NET SALES**	$100,000,000	$100,000,000	$100,000,000	$100,000,000	$100,000,000
(2)	**COST OF GOODS SOLD**	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000
(3)	**GROSS PROFIT**	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
(4)	**SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES**	35,000,000	35,000,000	35,000,000	35,000,000	35,000,000
(5)	**OPERATING PROFIT**	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
	OTHER INCOME/(EXPENSE)					
(6)	Other income/(expense)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(7)	Interest expense	(2,400,000)	(2,400,000)	(2,400,000)	(2,400,000)	(2,400,000)
(8)	**TOTAL OTHER INCOME/(EXPENSE)**	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)
(9)	**PROFIT BEFORE TAXES**	3,600,000	3,600,000	3,600,000	3,600,000	3,600,000
(10)	**INCOME TAX EXPENSE/(BENEFIT)**	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
(11)	**NET INCOME/(LOSS)**	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000
(12)	**WORKING CAPITAL REQUIREMENTS**	—	—	—	—	—
(13)	**CAPITAL EXPENDITURES LESS DEPRECIATION**	—	—	—	—	—
(14)	**CASH FLOW TO EQUITY**	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000
(15)	**PRESENT VALUE OF CASH FLOW TO EQUITY**	$ 13,333,333				
(16)	**CASH FLOW TO DEBT**	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000
(17)	**PRESENT VALUE OF CASH FLOW TO DEBT**	$ 26,666,667				
(18)	**CASH FLOW TO DEBT AND EQUITY**	$ 4,800,000	$ 4,800,000	$ 4,800,000	$ 4,800,000	$ 4,800,000
(19)	**MARKET VALUE OF EQUITY AND DEBT**	$ 40,000,000				

ASSUMPTIONS:

	2001	2002	2003	2004	2005
Annual sales growth	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of goods sold as a % of sales	60.0%	60.0%	60.0%	60.0%	60.0%
SG&A as a % of sales	35.0%	35.0%	35.0%	35.0%	35.0%
Other expense/(income) as a % of sales	1.0%	1.0%	1.0%	1.0%	1.0%
Income tax rate	33.3%	33.3%	33.3%	33.3%	33.3%
Working capital requirements as a % of the change in sales	15.0%	15.0%	15.0%	15.0%	15.0%
Capital expenditures less depreciation	—	—	—	—	—
Cost of equity capital	18.0%	18.0%	18.0%	18.0%	18.0%
Market value of debt	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667
Cost of debt capital	9.0%	9.0%	9.0%	9.0%	9.0%
Proportion of equity in capital structure	33.3%	33.3%	33.3%	33.3%	33.3%
Proportion of debt in capital structure	66.7%	66.7%	66.7%	66.7%	66.7%
Discount period for annual free cash flow	1.0	2.0	3.0	4.0	
Discount period for terminal value					4.0
Long-term earnings growth rate					0.0%

EXHIBIT 13

Value Estimate of ABC Company

Scenario 2

	Description	Fiscal Year 2001	Fiscal Year 2002	Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005
(1)	NET SALES	$100,000,000	$100,000,000	$100,000,000	$100,000,000	$100,000,000
(2)	COST OF GOODS SOLD	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000
(3)	GROSS PROFIT	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
(4)	SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES	35,000,000	35,000,000	35,000,000	35,000,000	35,000,000
(5)	OPERATING PROFIT	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
	OTHER INCOME/(EXPENSE)					
(6)	Other income/(expense)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(7)	Interest expense	n/a	n/a	n/a	n/a	n/a
(8)	TOTAL OTHER INCOME/(EXPENSE)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(9)	PROFIT BEFORE TAXES	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
(10)	INCOME TAX EXPENSE/(BENEFIT)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
(11)	NET INCOME/(LOSS)	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
(12)	WORKING CAPITAL REQUIREMENTS	—	—	—	—	—
(13)	CAPITAL EXPENDITURES LESS DEPRECIATION	—	—	—	—	—
(14)	CASH FLOW TO EQUITY AND DEBT	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
(15)	PRESENT VALUE OF CASH FLOW TO EQUITY AND DEBT	$ 40,000,000				
(16)	MARKET VALUE OF DEBT	$ 26,666,667				
(17)	MARKET VALUE OF EQUITY	$ 13,333,333				

ASSUMPTIONS:

	2001	2002	2003	2004	2005
Annual sales growth	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of goods sold as a percent of sales	60.0%	60.0%	60.0%	60.0%	60.0%
SG&A as a percent of sales	35.0%	35.0%	35.0%	35.0%	35.0%
Other expense/(income) as a percent of sales	1.0%	1.0%	1.0%	1.0%	1.0%
Income tax rate	33.3%	33.3%	33.3%	33.3%	33.3%
Working capital requirements as a % of the change in sales	15.0%	15.0%	15.0%	15.0%	15.0%
Capital expenditures less depreciation	$ —	$ —	$ —	$ —	$ —
Cost of equity capital	18.0%	18.0%	18.0%	18.0%	18.0%
Market value of debt	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667
Pre-tax cost of debt capital	9.0%	9.0%	9.0%	9.0%	9.0%
After-tax cost of debt	6.0%	6.0%	6.0%	6.0%	6.0%
WACC	10.0%	10.0%	10.0%	10.0%	10.0%
Proportion of equity in capital structure	33.3%	33.3%	33.3%	33.3%	33.3%
Proportion of debt in capital structure	66.7%	66.7%	66.7%	66.7%	66.7%
Discount period for annual free cash flow	1.0	2.0	3.0	4.0	
Discount period for terminal value					4.0
Long-term earnings growth rate					0.0%

EXHIBIT 14

Value Estimate of ABC Company

Scenario 3

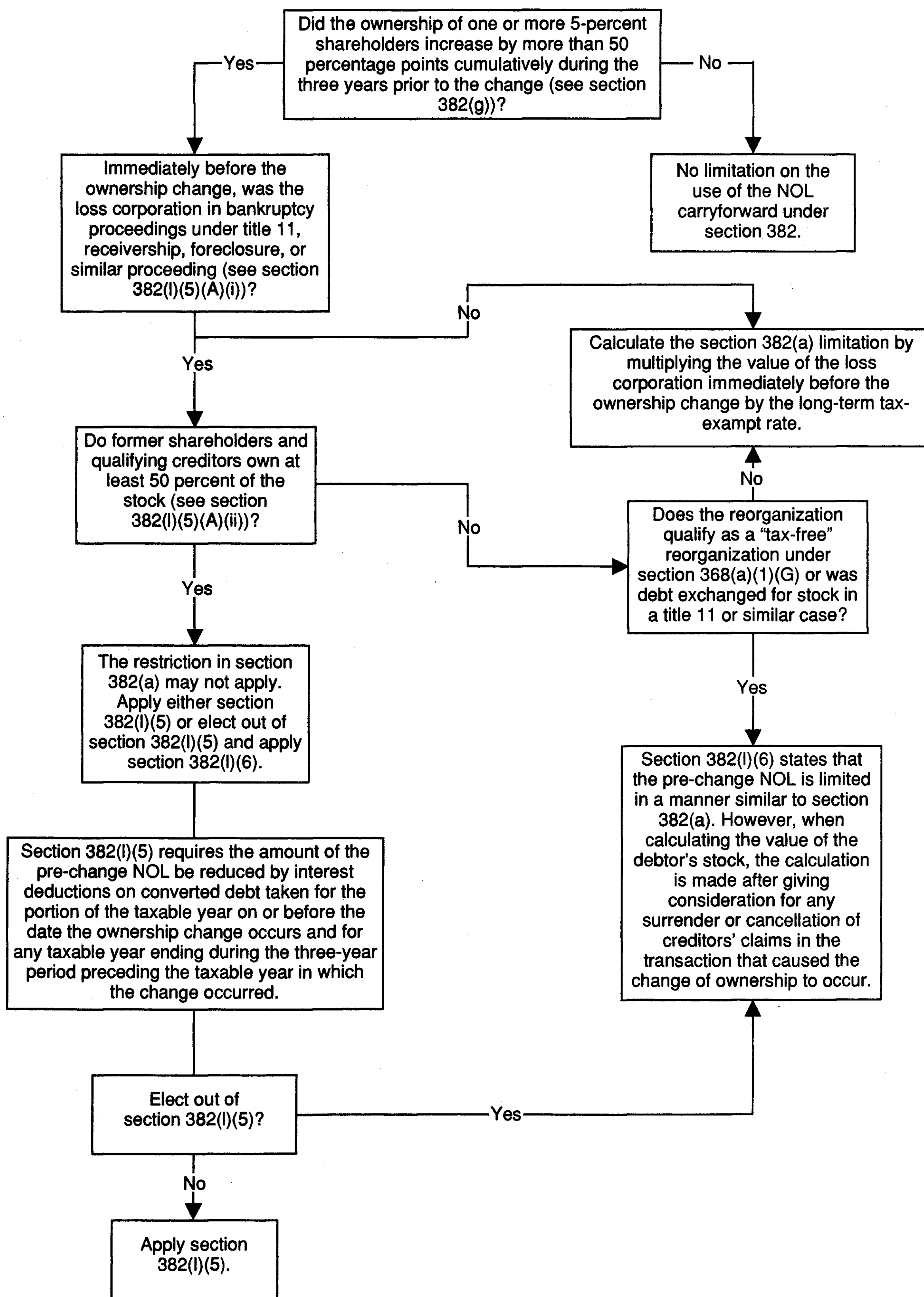
	Description	Fiscal Year 2001	Fiscal Year 2002	Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005
(1)	NET SALES	$100,000,000	$100,000,000	$100,000,000	$100,000,000	$100,000,000
(2)	COST OF GOODS SOLD	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000
(3)	GROSS PROFIT	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000
(4)	SELLING, GENERAL, AND ADMINISTRATIVE EXPENSES	35,000,000	35,000,000	35,000,000	35,000,000	35,000,000
(5)	OPERATING PROFIT	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
	OTHER INCOME/(EXPENSE)					
(6)	Other income/(expense)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(7)	Interest expense	n/a	n/a	n/a	n/a	n/a
(8)	TOTAL OTHER INCOME/(EXPENSE)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
(9)	PROFIT BEFORE TAXES	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
(10)	USE OF NOL	0	0	0	0	0
(11)	PROFIT BEFORE TAXES AFTER NOL ADJUSTMENT	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
(10)	INCOME TAX EXPENSE/(BENEFIT)	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
(11)	NET INCOME/(LOSS)	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
(12)	WORKING CAPITAL REQUIREMENTS	—	—	—	—	—
(13)	CAPITAL EXPENDITURES LESS DEPRECIATION	—	—	—	—	—
(14)	CASH FLOW TO EQUITY AND DEBT	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
(15)	PRESENT VALUE OF CASH FLOW TO EQUITY AND DEBT BEFORE CONSIDERATION OF INTEREST TAX SHIELDS	$ 33,333,333				
(16)	AMOUNT OF INTEREST TAX SHIELDS	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000
(17)	PRESENT VALUE OF INTEREST TAX SHIELDS	$ 6,666,667				
(18)	MARKET VALUE OF EQUITY AND DEBT	$ 40,000,000				

ASSUMPTIONS:

	2001	2002	2003	2004	2005
Annual sales growth	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of goods sold as a percent of sales	60.0%	60.0%	60.0%	60.0%	60.0%
SG&A as a percent of sales	35.0%	35.0%	35.0%	35.0%	35.0%
Other expense/(income) as a percent of sales	1.0%	1.0%	1.0%	1.0%	1.0%
Income tax rate	33.3%	33.3%	33.3%	33.3%	33.3%
Working capital requirements as a % of the change in sales	15.0%	15.0%	15.0%	15.0%	15.0%
Capital expenditures less depreciation	—	—	—	—	—
Cost of equity capital	18.0%	18.0%	18.0%	18.0%	18.0%
Market value of debt	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667	$ 26,666,667
Pre-tax cost of debt capital	9.0%	9.0%	9.0%	9.0%	9.0%
After-tax cost of debt	n/a	n/a	n/a	n/a	n/a
WACC	12.0%	12.0%	12.0%	12.0%	12.0%
Proportion of equity in capital structure	33.3%	33.3%	33.3%	33.3%	33.3%
Proportion of debt in capital structure	66.7%	66.7%	66.7%	66.7%	66.7%
Discount period for annual free cash flow	1.0	2.0	3.0	4.0	
Discount period for terminal value					4.0
Long-term earnings growth rate					0.0%

EXHIBIT 15

Limitation on Net Operating Loss (NOL) Carryforwards Following Ownership Change—IRC Section 382



APPENDIX
BANKRUPTCY AND BUSINESS VALUATION REFERENCE MATERIALS

Bankruptcy Reference Material

Newton, Grant. *Bankruptcy and Insolvency Accounting: Practice and Procedure.* 6th edition Vol. I. New York: John Wiley & Sons, Inc., 2000.

Newton, Grant. *Bankruptcy and Insolvency Accounting: Forms and Exhibits.* 6th edition Vol. II. New York: John Wiley & Sons, Inc., 2000.

Newton, Grant, and Gilbert Bloom. *Bankruptcy and Insolvency Taxation.* 2nd edition New York: John Wiley, updated annually.

Additional bankruptcy resources from the Association of Insolvency and Restructuring Advisors (AIRA). Among other things, the AIRA offers a bankruptcy credential known as CIRA (Certified Insolvency and Restructuring Advisor) and provides a significant amount of information, which is geared toward accountants and financial advisers, regarding bankruptcy and bankruptcy valuation issues. In particular, the AIRA provides specialized professional training and education courses, updates and an evaluation of current events, and a bimonthly publication, *AIRA NEWS*, which includes the *Distressed Business and Real Estate Newsletter.* The information discussed above can be accessed through the following AIRA Web site: www.airacira.org.

Additional bankruptcy resources are available from the American Bankruptcy Institute (ABI). While the ABI provides information geared towards bankruptcy attorneys, the information has application for all bankruptcy practitioners. In particular, the ABI provides information regarding current trends, bankruptcy publications, and professional education courses, and links to bankruptcy statutes, bankruptcy bills, and other relevant Web sites. These can be accessed through the ABI Web site: www.abiworld.com.

Business Valuation Reference Material

Brealy, Richard A., and Stewart C. Myers. *Principles of Corporate Finance.* 6th edition. Boston: Irwin/McGraw-Hill, 2000.

Copeland, Tom, and Vladimir Antikarov. *Real Options: A Practitioner's Guide.* New York: Texere, 2001.[1]

Copeland, Tom, Tim Koller, and Jack Murrin. *Valuation: Measuring and Managing the Value of Companies.* New York: John Wiley & Sons, Inc., 1995.

[1] A potential enhancement to traditional valuation methods is real options analysis. The application of option valuation models and techniques to real (as opposed to financial) assets is a relatively new concept. Furthermore, we are unaware of any situations where the bankruptcy courts have endorsed the application of real options analysis in the valuation of assets or business interests. Nevertheless, it appears that real options analysis will continue to gain acceptance in the financial community and play an increasingly important role in, among other things, the valuation of assets and business interests. While an examination of real options analysis is beyond the scope of this Practice Aid, we have added this reference as a resource to the reader regarding the application of real options analysis.

Damodaran, Aswath. *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance.* New York: John Wiley & Sons, Inc., 1994.

Fishman, Jay E., Shannon P. Pratt, et al. *Guide to Business Valuations.* 10th edition. Fort Worth: Practitioners Publishing Company, 2000.

Mercer, Z. Christopher. *Valuing Financial Institutions.* Homewood, IL: Business One Richard D. Irwin, Inc., 1992.

Mercer, Z. Christopher. *Quantifying Marketability Discounts: Developing and Supporting Marketability Discounts in the Appraisal of Closely Held Business Interests.* Memphis: Peabody Publishing, LP, 1997.

Pratt, Shannon P. *Business Valuation: Discounts and Premiums.* New York: John Wiley & Sons, Inc., 2001.

Pratt, Shannon P. *Cost of Capital: Estimations and Applications.* New York: John Wiley & Sons, Inc., 1998.

Pratt, Shannon P. *The Market Approach to Valuing Businesses.* New York: John Wiley & Sons, Inc., 2000.

Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs. *Valuing a Business: The Analysis and Appraisal of Closely Held Companies.* 4th edition. New York: McGraw-Hill, 2000.

Pratt, Shannon P., Robert F. Reilly, and Robert P. Schweihs. *Valuing Small Businesses & Professional Practices.* 3rd edition. New York: McGraw-Hill, 1998.

Reed, Meryl L., and Douglas R. Carmichael. *Troubled Businesses and Bankruptcies.* Fort Worth: Practitioners Publishing Company, 1998.

Reilly, Robert F., and Robert P. Schweihs. *The Handbook of Advanced Business Valuation.* New York: McGraw-Hill, 2000.

Reilly, Robert F., and Robert P. Schweihs. *Valuing Intangible Assets.* New York: McGraw-Hill, 1999.

Smith, Gordon V., and Russell L. Parr. *Valuation of Intellectual Property and Intangible Assets.* 2nd edition. New York: John Wiley & Sons, Inc., 1994.

Additional valuation resources from Damodaran Online. Among other things, Aswath Damodaran's Web site, located at equity.stern.nyu.edu/~adamodar, contains published literature, research, and working papers regarding a variety of valuation topics.

Additional valuation resources from the AICPA. Among other things, the AICPA offers a valuation credential known as Accredited in Business Valuation (ABV), and provides a significant amount of information, which is geared toward accountants and financial advisers, regarding valuation. In particular, the AICPA provides information regarding professional standards and other authoritative literature, valuation publications, professional education courses, and links to other relevant Web sites. The information discussed above can be accessed through the following AICPA Web sites: www.aicpa.org and www.cpa2biz.com.

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