

ACCOUNTING & VALUATION GUIDE

Testing Goodwill for Impairment

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Preface

About This AICPA Accounting and Valuation Guide

This AICPA Accounting and Valuation Guide has been developed by the AICPA Impairment Task Force (task force) and AICPA staff. This guide provides guidance and illustrations for preparers of financial statements, independent auditors, and valuation specialists¹ regarding the accounting, valuation, and disclosures related to goodwill impairment testing.² The valuation guidance in this guide is focused on measuring fair value of a reporting unit for financial reporting purposes.

The financial accounting and reporting guidance contained in this guide has been reviewed and approved by the affirmative vote of at least two-thirds of the members of the Financial Reporting Executive Committee (FinREC), which is the designated senior committee of the AICPA authorized to speak for the AICPA in the areas of financial accounting and reporting. Conforming changes made to the financial accounting and reporting guidance contained in this guide will be approved by the FinREC Chair (or his or her designee). Updates made to the financial accounting and reporting guidance in this guide exceeding that of conforming changes will be approved by the affirmative vote of at least two-thirds of the members of FinREC.

This guide

- identifies certain requirements set forth in the Financial Accounting Standards Board (FASB) *Accounting Standards Codification*[®] (ASC).
- describes FinREC's understanding of prevalent or sole practice concerning certain issues. In addition, this guide may indicate that FinREC expresses a preference for the prevalent or sole practice, or it may indicate that FinREC expresses a preference for another

¹ Although this guide uses the term *valuation specialist*, Statement on Standards for Valuation Services No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100), which is a part of AICPA *Professional Standards*, defines a member who performs valuation services as a *valuation analyst*. The term *valuation specialist*, as used in this guide, is synonymous to the term *valuation analyst*, as used in AICPA *Professional Standards*.

When referring to the valuation specialist in this guide, it is commonly presumed that the valuation specialist is an external party, but if individuals within the entity possess the abilities, skills, and experience to perform valuations, they can also serve in the capacity of a valuation specialist.

² On July 1, 2013, the Financial Accounting Standards Board (FASB) issued for public comment several Private Company Council (PCC) proposals that address private company stakeholder concerns raised about the relevance and complexity of certain aspects of U.S. generally accepted accounting principles (GAAP).

One of the proposals, Proposed Accounting Standards Update *Intangibles—Goodwill and Other (Topic 350): Accounting for Goodwill (a proposal of the Private Company Council)*, which is derived from PCC Issue No. 13-01B, *Accounting for Goodwill Subsequent to a Business Combination*, would permit amortization of goodwill and a simplified goodwill impairment model. This would enable private companies that elect the accounting alternative within GAAP to amortize goodwill on a straight-line basis over the useful life of the primary asset acquired in a business combination, not to exceed 10 years. Goodwill would be tested for impairment only when a triggering event occurs that would indicate that the fair value of an entity may be below its carrying amount. Moreover, goodwill would be tested for impairment at the entity-wide level as compared to the current requirement to test at the reporting unit level.

Please refer to the FASB website for the latest information regarding the status of this project: www.fasb.org/cs/ContentServer?c=Page&pagename=FASB%2FPage%2FSectionPage&cid=1351027243076.

practice that is not the prevalent or sole practice; alternatively, FinREC may express no view on the matter.

- identifies certain other, but not necessarily all, practices concerning certain accounting issues without expressing FinREC's views on them.
- provides guidance that has been supported by FinREC on the accounting, reporting, or disclosure treatment of transactions or events that are not set forth in FASB ASC.

Accounting guidance for nongovernmental entities included in this AICPA Accounting and Valuation Guide is a source of nonauthoritative accounting guidance. FASB ASC is the authoritative source of U.S. accounting and reporting standards for nongovernmental entities, in addition to guidance issued by the Securities and Exchange Commission. AICPA members should be prepared to justify departures from U.S. generally accepted accounting principles, as discussed in Rule 203, *Accounting Principles* (AICPA, *Professional Standards*, ET sec. 203 par. .01). In addition, AICPA members who perform engagements to estimate value that culminate in the expression of a conclusion of value or a calculated value are subject to the requirements of AICPA Statement on Standards for Valuation Services.

This guide does not include auditing guidance,³ however, auditors may use it to obtain an understanding of the accounting requirements and the valuation process applicable to goodwill impairment testing.

Recognition

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³ In October 2011, the AICPA Auditing Standards Board (ASB) issued Statement on Auditing Standards (SAS) No. 122, *Statements on Auditing Standards: Clarification and Recodification* (AICPA, *Professional Standards*), which contains 39 clarified SASs and supersedes all outstanding SASs through SAS No. 121, except for 8 SASs. SAS No. 122 represents the redrafting of existing SASs to apply the ASB's clarity drafting conventions and to converge with International Standards on Auditing. SAS No. 122 is effective for audits of financial statements for periods ending on or after December 15, 2012. Refer to individual sections for specific effective date language.

AU-C section 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures* (AICPA, *Professional Standards*), addresses the auditor's responsibilities relating to accounting estimates, including fair value accounting estimates and related disclosures, in an audit of financial statements. This section supersedes AU section 342, *Auditing Accounting Estimates* (SAS No. 57), and AU section 328, *Auditing Fair Value Measurements and Disclosures* (SAS No. 101). AU-C section 540 combines the requirements and guidance from AU section 342 (SAS No. 57) and AU section 328 (SAS No. 101), but it does not change or expand those standards in any significant respect.

Auditors may also find it helpful to refer to the AICPA Audit Guide *Special Considerations in Auditing Financial Instruments*, which, among other things, addresses the auditor's responsibilities relating to auditing accounting estimates, including fair value accounting estimates, and related disclosures.

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Guidance Considered in This Edition

Authoritative guidance issued through May 1, 2013, has been considered in the development of this edition of the guide.

This guide includes relevant guidance issued up to and including the following:

- FASB Accounting Standards Update No. 2013-11, *Income Taxes (Topic 740): Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists (a consensus of the FASB Emerging Issues Task Force)*
- AICPA's Statement on Standards for Valuation Services No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100)

Readers of this guide should consider guidance issued subsequent to those items listed previously to determine their effect on entities covered by this guide. In determining the applicability of recently issued guidance, its effective date should also be considered.

AICPA.org Website

The AICPA encourages you to visit its website at www.aicpa.org and the Financial Reporting Center at www.aicpa.org/FRC. The Financial Reporting Center supports members in the execution of high-quality financial reporting. Whether you are a financial statement preparer or a member in public practice, this center provides exclusive member-only resources for the entire financial reporting process and provides timely and relevant news, guidance, and examples supporting the financial reporting process, including accounting, preparing financial statements, and performing compilation, review, audit, attest, or assurance and advisory engagements. Certain content on AICPA websites referenced in this guide may be restricted to AICPA members only.

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Introduction

.01 Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 350, *Intangibles—Goodwill and Other*, requires an annual impairment test of goodwill, at a level of reporting referred to as the reporting unit. According to FASB ASC 350, entities have the option to first assess qualitative factors to determine whether it is necessary to perform the first step of the two-step goodwill impairment test. In other words, entities are not required to calculate the fair value of a reporting unit unless it is more likely than not that the reporting unit's fair value is less than its carrying amount. Alternatively, entities have an unconditional option to bypass the qualitative test and perform the first step of the goodwill impairment test directly. The first step compares the fair value of the reporting unit with its carrying amount; if the fair value is less than the carrying amount, then the second step is performed, measuring the amount of the impairment loss, if any.

.02 This guide provides nonauthoritative accounting and valuation guidance for impairment testing of goodwill. Specifically, it focuses on practice issues related to the qualitative assessment and the first step of the two-step test. This guide addresses such issues as identifying reporting units and assigning assets and liabilities to a reporting unit. It also describes the framework for performing the optional qualitative assessment and illustrates one approach of performing it. It also discusses measuring the fair value of a reporting unit in accordance with the guidance in FASB ASC 820, *Fair Value Measurement*, and illustrates the valuation techniques often utilized for this purpose. This guide also provides an illustration of the second step of the two-step goodwill impairment test.

.03 Measuring fair value requires a specialized skill either within the entity or by using an external valuation specialist. Regardless of whether fair value measurements are developed by management or a third party, management is responsible for the fair value measurements that are used to prepare the financial statements and for underlying assumptions used in developing these fair value measurements. Auditors are expected to understand how the valuation techniques used for measuring fair value comply with the requirements of FASB ASC 820, assess reasonableness of the inputs, assumptions and valuations, and evaluate adequateness of the related disclosures. This guide will help preparers, auditors, and valuation specialists understand the requirements of FASB ASC 350 and FASB ASC 820 and the valuation techniques used when testing goodwill for impairment.

.04 This guide does not provide an in-depth discussion of the requirements of FASB ASC 820, but rather describes the impact its requirements have on the assumptions and techniques used to value reporting units when testing goodwill for impairment. This guide provides examples, discussions, and illustrations of the approaches and techniques used most often in practice for measuring the fair value of reporting units, specifically the discounted cash flow method, the guideline public company method, and the guideline company transactions method.

.05 This guide only addresses goodwill impairment testing. If goodwill and another asset (or asset group) of a reporting unit are tested for impairment at the same time, the other asset (or asset group) is required to be tested for impairment before goodwill. This guide does not address impairment testing of other assets that may be a part of a reporting unit.

Chapter 1

Concepts and Application of Financial Accounting Standards Board Accounting Standards Codification 820

1.01 Financial Accounting Standards Board (FASB)¹ *Accounting Standards Codification* (ASC) 820, *Fair Value Measurement*, defines *fair value* and establishes a framework for measuring fair value for financial reporting purposes. This chapter provides an overview of the concepts and framework of FASB ASC 820 and is intended to provide background for discussions included in chapter 2, “Accounting Considerations When Testing Goodwill for Impairment;” chapter 3, “Qualitative Assessment;” and chapter 4, “Measuring Fair Value of a Reporting Unit,” of this guide. The sections “Applying FASB ASC 820 Valuation Techniques to Reporting Units” and “Applying FASB ASC 820 Framework to Reporting Units” in this chapter provide a more specific discussion of the requirements of FASB ASC 820 as it pertains to measuring the fair value of a reporting unit for goodwill impairment testing.

General Concepts of FASB ASC 820

1.02 As stated in FASB ASC 820-10-05-1B

[f]air value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available. For other assets and liabilities, observable market transactions and market information might not be available. However, the objective of a fair value measurement in both cases is the same—to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions (that is, an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability).

1.03 FASB ASC 820-10-05-1C further explains that

[w]hen a price for an identical asset or liability is not observable, a reporting entity measures fair value using another valuation technique that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs. Because fair value is a market-based measurement, it is measured using the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. As a result, a reporting entity’s intention to hold an asset or to settle or otherwise fulfill a liability is not relevant when measuring fair value.

¹ Words or terms defined in the glossary are set in italicized type the first time they appear in the body of this guide.

1.04 FASB ASC 820 codifies a number of fair value concepts, representing the framework for fair value measurement in financial reporting. These concepts include the following:

- *Fair value definition.* Under FASB ASC 820, fair value is defined as “[t]he price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.” Under this definition, fair value is an exit price from a *market participant* perspective.
- *The asset or liability.* According to paragraphs 2B–2E of FASB ASC 820-10-35

35-2B A fair value measurement is for a particular asset or liability. Therefore, when measuring fair value a reporting entity shall take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Such characteristics include, for example, the following:

- a. The condition and location of the asset
- b. Restrictions, if any, on the sale or use of the asset.

35-2C The effect on the measurement arising from a particular characteristic will differ depending on how that characteristic would be taken into account by market participants....

35-2D The asset or liability measured at fair value might be either of the following:

- a. A standalone asset or liability (for example, a financial instrument or a nonfinancial asset)
- b. A group of assets, a group of liabilities, or a group of assets and liabilities (for example, a reporting unit or a business).

35-2E Whether the asset or liability is a standalone asset or liability, a group of assets, a group of liabilities, or a group of assets and liabilities for recognition or disclosure purposes depends on its unit of account. The unit of account for the asset or liability shall be determined in accordance with the Topic that requires or permits the fair value measurement, except as provided in this Topic [FASB ASC 820].

- *The transaction.* Paragraphs 3 and 5 of FASB ASC 820-10-35 state

35-3 A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date under current market conditions.

35-5 A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:

- a. In the principal market for the asset or liability
- b. In the absence of a principal market, in the most advantageous market for the asset or liability.

Paragraphs 5A–6C of FASB ASC 820-10-35 provide further discussion on identifying the principal (or most advantageous) markets.

- *Market participants.* FASB ASC 820-10-35-9 provides that

[a] reporting entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use in pricing the asset or liability, assuming that market participants act in their economic best interest. In developing those assumptions, a reporting entity need not identify specific market participants. Rather, the reporting entity shall identify characteristics that distinguish market participants generally, considering factors specific to all of the following:

 - a. The asset or liability
 - b. The principal (or most advantageous) market for the asset or liability
 - c. Market participants with whom the reporting entity would enter into a transaction in that market.
- *The price.* According to FASB ASC 820-10-35-9A

[f]air value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (that is, an exit price) regardless of whether that price is directly observable or estimated using another valuation technique.
- *Valuation techniques.*² As stated in FASB ASC 820-10-35-24A

[t]he objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Three widely used valuation techniques are the market approach, cost approach, and income approach. The main aspects of those approaches are summarized in paragraphs 820-10-55-3A through 55-3G. An entity shall use valuation techniques consistent with one or more of those approaches to measure fair value.
- *Fair value hierarchy.* As indicated in FASB ASC 820-10-35-37

[t]o increase consistency and comparability in fair value measurements and related disclosures, this Topic [FASB ASC 820] establishes a fair value hierarchy that categorizes into three levels ... the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to

² Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 820, *Fair Value Measurement*, refers to valuation approaches and valuation techniques. However, Statement on Standards for Valuation Services (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100), refers to valuation approaches and methods (not techniques). SSVS No. 1 defines *valuation method* as, within approaches, a specific way to determine value. This definition is consistent with the meaning attributed to valuation techniques in FASB ASC 820. Also, in practice, many valuation techniques are referred to as methods (for example, guideline public company method, guideline company transactions method, and discounted cash flow method). As a result, this guide uses the terms *technique* and *method* interchangeably to refer to a specific way of determining value within an approach.

quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).

1.05 FASB ASC 820 also codifies a number of fair value concepts as it relates to nonfinancial assets, as follows:

- *Highest and best use.* Paragraphs 10A-10C of FASB ASC 820-10-35 indicate that

35-10A A fair value measurement of a nonfinancial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

35-10B The highest and best use of a nonfinancial asset takes into account the use of the asset that is physically possible, legally permissible, and financially feasible...

35-10C Highest and best use is determined from the perspective of market participants, even if the reporting entity intends a different use. However, a reporting entity's current use of a nonfinancial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximize the value of the asset.

- *Valuation premise for nonfinancial assets.* FASB ASC 820-10-35-10E states

The highest and best use of a nonfinancial asset establishes the valuation premise used to measure the fair value of the asset, as follows:

- a. The highest and best use of a nonfinancial asset might provide maximum value to market participants through its use in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (for example, a business).
 1. If the highest and best use of the asset is to use the asset in combination with other assets or with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets or with other assets and liabilities and that those assets and liabilities (that is, its complementary assets and the associated liabilities) would be available to market participants.
 2. Liabilities associated with the asset and with the complementary assets include liabilities that fund working capital, but do not include liabilities used to fund assets other than those within the group of assets.
 3. Assumptions about the highest and best use of a nonfinancial asset shall be consistent for all of the assets (for which highest and best use is relevant)

of the group of assets or the group of assets and liabilities within which the asset would be used.

- b. The highest and best use of a nonfinancial asset might provide maximum value to market participants on a standalone basis. If the highest and best use of the asset is to use it on a standalone basis, the fair value of the asset is the price that would be received in a current transaction to sell the asset to market participants that would use the asset on a standalone basis.

As indicated in FASB ASC 820-10-35-11A

[t]he fair value measurement of a nonfinancial asset assumes that the asset is sold consistent with the unit of account specified in other Topics (which may be an individual asset). That is the case even when that fair value measurement assumes that the highest and best use of the asset is to use it in combination with other assets or with other assets and liabilities because a fair value measurement assumes that the market participant already holds the complementary assets and associated liabilities.

Applying FASB ASC 820 Valuation Techniques to Reporting Units

1.06 As indicated in paragraph .04 of the AICPA's Statement on Standards for Valuation Services (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100), in the process of estimating value, the *valuation specialist* applies valuation approaches and valuation methods and uses professional judgment. The use of professional judgment is an essential component of estimating value. Also, it is important for the valuation specialist to consider facts and circumstances specific to the reporting unit being valued.

1.07 The fair value of a reporting unit is the price that would be received to sell the reporting unit as a whole in an orderly transaction between market participants at the measurement date. Valuation approaches used to measure the fair value of a reporting unit may be classified broadly as income, market, and asset.³ FASB ASC 820-10-35-24 states that “[a] reporting entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.” Therefore, when valuing a reporting unit for goodwill impairment testing purposes, all three approaches should be considered and the approach or approaches that are appropriate under the circumstances should be selected.

³ FASB ASC 820 describes three valuation approaches—income, market, and cost. The concepts underlying these approaches apply broadly to the valuation of discrete assets and business entities. Within FASB's cost approach concept, practitioners distinguish valuations of individual assets and business entities by using different terminology. The cost approach is said to have been applied when valuing individual assets, and the asset approach is said to have been applied when valuing business entities. The *International Glossary of Business Valuation Terms*, which has been adopted by a number of professional societies and organizations, including the AICPA, and is included in appendix B of SSVS No. 1, defines *asset approach* as a general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities. This guide addresses valuation of reporting units. As a result, this guide focuses on the three approaches that can be used to value a reporting unit (income, market, and asset).

1.08 Each of the three approaches can be used to measure fair value of a reporting unit for goodwill impairment testing. As provided in FASB ASC 820-10-35-24B

[i]n some cases, a single valuation technique will be appropriate.... In other cases, multiple valuation techniques will be appropriate (for example, that might be the case when valuing a reporting unit). If multiple valuation techniques are used to measure fair value, the results (that is, respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.

Income Approach

1.09 As stated in FASB ASC 820-10-55-3F, “[t]he income approach converts future amounts (for example, cash flows or income and expenses) to a single current (that is, discounted) amount. When the income approach is used, the fair value measurement reflects current market expectations about those future amounts.” The *income approach* obtains its conceptual support from its basic assumption that value emanates from expectations of future income and cash flows.

1.10 The income approach may be used to estimate the fair value of the reporting unit. Whereas the *market approach* is based on market data which may need to be adjusted for any differences between the selected comparable entities and the subject reporting unit, the income approach is often based on *unobservable inputs*. As stated in FASB ASC 820-10-35-54A

[a] reporting entity shall develop unobservable inputs using the best information available in the circumstances, which might include the reporting entity’s own data. In developing unobservable inputs, a reporting entity may begin with its own data, but it shall adjust those data if reasonably available information indicates that other market participants would use different data or there is something particular to the reporting entity that is not available to other market participants (for example, an entity-specific synergy).

1.11 The valuation technique commonly used in applying the income approach to value a reporting unit is the *discounted cash flow (DCF) method*. The DCF method requires estimating future economic benefits and applying a market participant *discount rate* to equate them to a single present value. The future economic benefits to be discounted are generally a stream of periodic cash flows attributable to the asset being valued⁴ over a discrete period, followed by the application of a *terminal value* at the end of the discrete period. However, future economic benefits could take other forms under specific circumstances (for example, a lump sum payment at a particular time in the future without any interim cash flows). There are many considerations in applying the income approach. A detailed discussion and an illustration of the DCF method are included in paragraphs 4.21–.42, 4.86–.87, and schedules 4.1–4.9 of the “Comprehensive Example” section.

⁴ The asset being valued could be a single asset, a collection of assets, or an entire entity.

Market Approach

1.12 As stated in FASB ASC 820-10-55-3A, “[t]he market approach uses prices and other relevant information generated by market transactions involving identical or comparable (that is, similar) assets, liabilities, or a group of assets and liabilities, such as a business.” The market approach bases the fair value measurement on what other similar entities or comparable transactions indicate the value to be.

1.13 The market approach can be used to value a reporting unit provided that appropriate market data can be identified. The market approach bases the fair value measurement on the information obtained from observed trading prices and transaction terms of comparable entities, comparing and contrasting their characteristics and using information from the observed prices of the comparable entities to benchmark the fair value measurement.

1.14 Two commonly used valuation techniques for measuring the fair value of a reporting unit under the market approach are the *guideline public company method* and the *guideline company transactions method*. The guideline public company method compares pricing metrics based on the stock prices of public companies to the subject reporting unit. These pricing metrics, such as price-to-revenues or price-to-earnings before interest, taxes, depreciation, and amortization (*EBITDA*), are calculated for each public company. These metrics are then analyzed, adjusted if appropriate, and applied to the subject reporting unit’s figures. The guideline company transactions method is similar, but it uses recent merger and acquisition transaction data for acquisitions of target companies that are similar to the subject reporting unit.

1.15 The ability to apply a market approach may be limited by the availability of guideline publicly traded entities and market data for comparable transactions. However, even if a market approach is deemed to be appropriate because suitable data is available, adjustments to the market multiples are normally necessary to reflect the differences in the level of comparability between the guideline entities and the subject reporting unit. *Control premiums*^{5,6} may also need to be considered.

1.16 A detailed discussion and an illustration of the guideline public company method are included in paragraphs 4.44–72, 4.88, and schedules 4.10–4.10.2 of the “Comprehensive Example” section. A detailed discussion and an illustration of the guideline company transactions method are included in paragraphs 4.73–83, 4.89, and schedules 4.11–4.11.1 of the “Comprehensive Example” section.

Asset Approach

1.17 The *International Glossary of Business Valuation Terms*, which has been adopted by a number of professional societies and organizations, including the AICPA, and is included in appendix B of SSVS No. 1, defines the *asset approach* as “[a] general way of determining a value indication of a business,

⁵ As of the writing of this guide, the Appraisal Foundation is working on a project regarding the assessment and measurement of control premiums in valuations for financial reporting. The purpose of this project is to present views on how to approach and apply certain aspects of the valuation process appropriate for measuring the fair value of controlling interests in business enterprises for financial reporting purposes. Please refer to the Appraisal Foundation’s website at www.appraisalfoundation.org for further information about this project and its status.

⁶ Control premiums are also frequently referred to as acquisition premiums.

business ownership interest, or security using one or more methods based on the value of the assets net of liabilities.”

1.18 The asset approach is used in very limited situations for valuing a reporting unit. The application of the asset approach entails separate valuation of each asset and liability within the reporting unit. The fair value of the reporting unit is the sum of the fair values of its net assets. Each asset or liability within the reporting unit may be valued using a different valuation technique (that is, income, market, or *cost approach*) that is applicable to each asset or liability within the reporting unit. When using the asset approach, it is important to consider not only those assets that are recognized on the entity’s financial statements but also assets that are not recognized on the financial statements. Examples of applying this approach to value a reporting unit may be when the reporting unit is a holding company that contains a joint venture investment and land or is an operating company with earnings that do not provide a sufficient return on assets.

Applying FASB ASC 820 Framework to Reporting Units

1.19 FASB ASC 820 provides a framework for measuring fair value and includes key concepts that should be applied when measuring the fair value of a reporting unit for purposes of the goodwill impairment test. The following process, which is described in paragraphs 1.20–.28, provides ways of obtaining information or making assumptions about required information when measuring the fair value of a reporting unit:

- Determine the unit of account
- Determine the valuation premise
- Identify the potential markets
- Determine market access
- Apply the appropriate valuation approaches
- Determine the fair value

Determine the Unit of Account

1.20 The unit of account determines what is being measured by reference to the level at which the asset is aggregated or disaggregated based on U.S. generally accepted accounting principles requirements. According to FASB ASC 350, *Intangibles—Goodwill and Other*, the unit of account for goodwill impairment testing is the reporting unit.

Determine the Valuation Premise

1.21 The reporting unit’s highest and best use establishes the valuation premise used to measure its fair value. After determining the unit of account, an entity should assess the highest and best use for the reporting unit based on the perspective of market participants. Entity-specific intentions are not considered in the measurement of fair value unless those assumptions are consistent with market participant views.

1.22 Entities need to consider whether the market participant would operate the reporting unit on a standalone basis or in combination with other assets or other reporting units. This decision will affect the fair value of the reporting unit. For example, if an entity assumes that a market participant

would continue to operate the reporting unit on a standalone basis, the reporting unit would be valued as such. Adjustments for market participant synergies (when it is assumed that the market participant possesses assets that can be utilized by the reporting unit to enable it to either increase revenues with the same cost structure or realize lower costs on the same volume) or additional expenses for items unique to the operations of the reporting unit would need to be considered.

1.23 If the entity assumes that the market participant would operate the reporting unit in conjunction with other assets or with other reporting units in an ongoing business, these factors would be incorporated into the fair value measurement of each individual reporting unit. See example 4-1, “Incorporating Market Participant Assumptions in Prospective Financial Information.”

Identify the Potential Markets

1.24 As indicated in FASB ASC 820-10-35-5A, “[a] reporting entity need not undertake an exhaustive search of all possible markets to identify the principal market or, in the absence of a principal market, the most advantageous market, but it shall take into account all information that is reasonably available.” In order to identify the principal (or most advantageous) market, the entity would take into account the potential buyers likely to consider acquiring a controlling interest in the reporting unit at the time of goodwill impairment testing.

1.25 In making assumptions that may have an impact on the fair value of the reporting unit, it is helpful to consider the following factors when identifying the principal (or most advantageous) market:

- a. Determine whether the potential market is active, inactive, or recently became inactive.
- b. Identify the groups of potential market participants (for example, strategic or financial buyers) and within those broad categories, identify subgroups of potential market participants.
- c. Assess the competitive nature of the market (for example, perfect competition or monopolistic).

Although these market factors may provide some pricing information, significant adjustments may need to be made when measuring the fair value of reporting units.

Determine Market Access

1.26 Once an entity has identified the potential market(s) it should assess whether it has access to these potential markets. As stated in FASB ASC 820-10-35-6A, “the reporting entity must have access to the principal (or most advantageous) market at the measurement date.” As a result, management should identify the characteristics of potential market participants and principal (or most advantageous) market(s) when measuring fair value.

Apply the Appropriate Valuation Approaches

1.27 Next, an entity would need to apply the appropriate valuation technique. As discussed in paragraph 1.07, when measuring the fair value of a reporting unit the income, market, and asset approaches would be considered

and the approach or approaches that are appropriate under the circumstances should be selected. Under each approach, various valuation techniques can be used to measure fair value, and entities may need to consider multiple valuation techniques. In some cases, the fair value measurements related to reporting units will require a greater level of judgment and subjectivity due to the lack of existing markets and observable inputs. Entities would need to document the key assumptions made and techniques used when measuring the fair value of a reporting unit.

Determine the Fair Value

1.28 Lastly, the entity should assess the results of the various valuation techniques used and arrive at a fair value measurement for a reporting unit. The determination of fair value will require judgment. See chapter 4 for an illustration of how to determine the fair value measurement of a reporting unit to be used for goodwill impairment testing when both the income and the market approaches are used.

Chapter 2

Accounting Considerations When Testing Goodwill for Impairment

Introduction

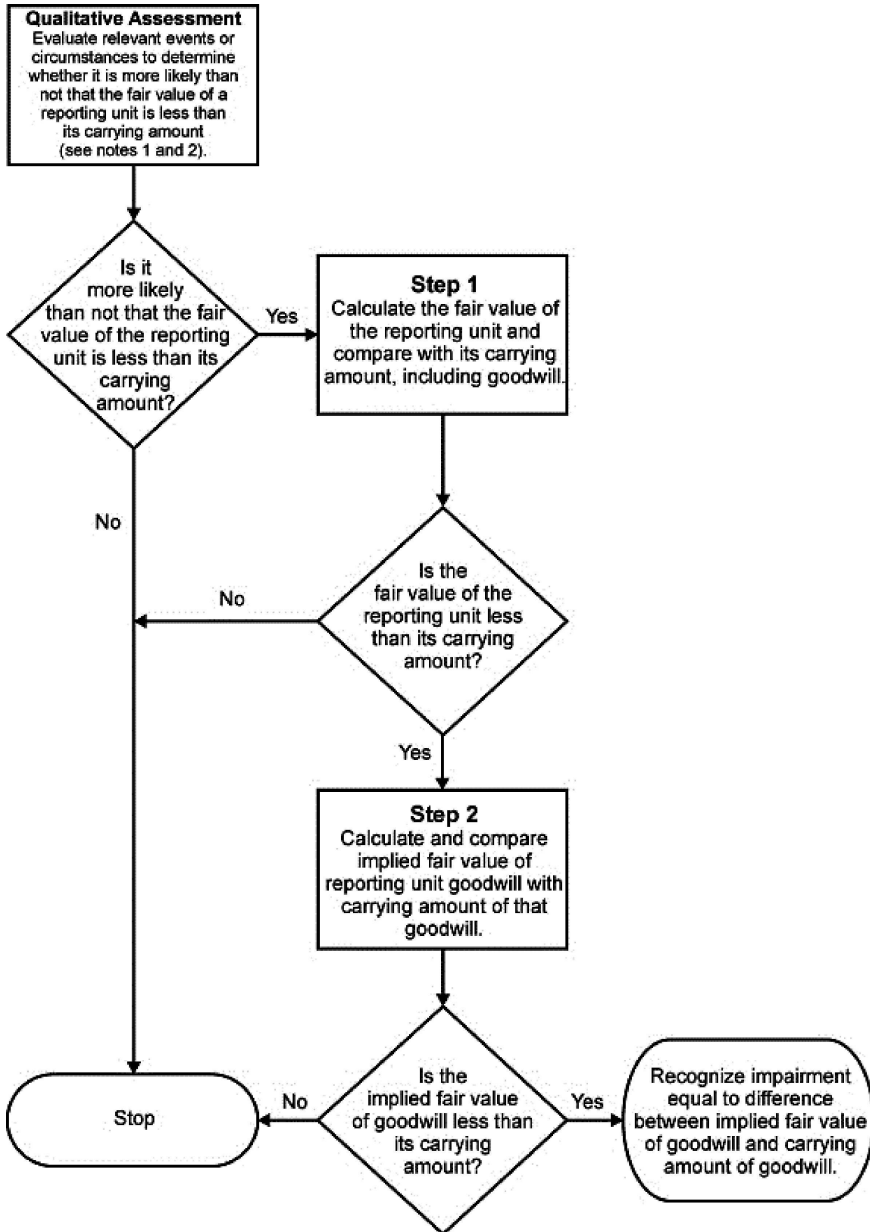
2.01 The Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) Master Glossary defines goodwill as “[a]n asset representing the future economic benefits arising from other assets acquired in a business combination or an acquisition by a not-for-profit entity that are not individually identified and separately recognized.” (Throughout the remainder of this guide, the term *business combination* includes an acquisition by a not-for-profit entity.) FASB ASC 805-30-30-1 states

[t]he acquirer shall recognize goodwill as of the acquisition date, measured as the excess of (a) over (b):

- a. The aggregate of the following:
 1. The consideration transferred measured in accordance with this Section [FASB ASC 805-30-30], which generally requires acquisition-date fair value (see paragraph 805-30-30-7)
 2. The fair value of any noncontrolling interest in the acquiree
 3. In a business combination achieved in stages, the acquisition-date fair value of the acquirer’s previously held equity interest in the acquiree.
- b. The net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed measured in accordance with this Topic [FASB ASC 805].

2.02 Goodwill is not amortized, but rather is tested, at least annually, for impairment at a level of reporting referred to as the reporting unit as prescribed in FASB ASC 350, *Intangibles—Goodwill and Other*. FASB ASC 350 permits an entity to first assess qualitative factors to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount, including goodwill. If it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step goodwill impairment test is unnecessary. If it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the first step of the two-step test is required to be performed. An entity may bypass the qualitative assessment for any of its reporting units, in any period, and directly perform the first step of the goodwill impairment test. An entity may resume performing the qualitative assessment in any subsequent period.

2.03 FASB ASC 350-20-55-25 contains the following flowchart which illustrates the optional qualitative assessment and the two-step goodwill impairment test.

**Notes:**

1. An entity has the unconditional option to skip the qualitative assessment and proceed directly to performing step 1, except in the circumstance where a reporting unit has a carrying amount that is zero or negative.

2. An entity having a reporting unit with a carrying amount that is zero or negative would proceed directly to step 2 if it determines, as a result of performing its required qualitative assessment, that it is more likely than not that a goodwill impairment exists. To perform step 2, an entity must calculate the fair value of a reporting unit.

2.04 The primary purpose of this chapter is to discuss and illustrate the accounting requirements of the two-step goodwill impairment test. This chapter addresses, among other issues, the identification of reporting units, the assignment of assets and liabilities to a reporting unit, and the calculation of the second step of the goodwill impairment test. Chapter 3, “Qualitative Assessment,” addresses how companies may consider and analyze the qualitative factors in order to determine whether or not the first step of the goodwill impairment test should be performed. Entities should assess the totality of events or circumstances when determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

Two-Step Goodwill Impairment Test

2.05 Paragraphs 4–13 of FASB ASC 350-20-35 discuss a two-step goodwill impairment test. The first step identifies potential impairment and the second step measures the amount of impairment loss to be recognized, if any. If the carrying amount of a reporting unit is greater than zero (for a discussion of circumstances when the carrying amount of the reporting unit is zero or negative, see paragraph 2.07), step 1 of the goodwill impairment test should be performed if an entity determines, using a qualitative assessment, that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or if an entity bypasses the qualitative assessment and proceeds directly to performing step 1. Step 2 is only performed when a potential impairment is identified in step 1. FASB ASC 350-20-35-2 describes impairment as “the condition that exists when the carrying amount of goodwill exceeds its implied fair value.” The Impairment Task Force (task force) believes that if the carrying amount of a reporting unit is greater than zero, an impairment loss can only be recognized if a reporting unit fails step 1 (that is, the fair value of a reporting unit is less than its carrying amount).¹

2.06 As stated in FASB ASC 350-20-35-4, “[t]he first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill.” The carrying amount of a reporting unit equals assets (including goodwill) less liabilities assigned to that reporting unit. The task force believes that the carrying amount can be calculated using an enterprise or an equity approach. See paragraphs 2.20–21 for further discussion. If the carrying amount of a reporting unit is greater than zero and its fair value exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the goodwill impairment test is unnecessary.

¹ Paragraph BC23 of Accounting Standards Update (ASU) No. 2011-08, *Intangibles—Goodwill and Other (Topic 350): Testing Goodwill for Impairment*, states that “[t]he Board decided not to permit an entity to skip directly to performing the second step of the impairment test because in order to complete that step, an entity first must calculate fair value under the first step of the test.”

Paragraph BC23 and other paragraphs from the “Background Information and Basis for Conclusions” section of ASU No. 2011-08 were not codified in Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC); however, the task force believes these paragraphs provide helpful guidance and, therefore, decided to incorporate them in this guide.

2.07 FASB ASC 350-20-35-8A provides that

[i]f the carrying amount of a reporting unit is zero or negative, the second step of the impairment test shall be performed to measure the amount of impairment loss, if any, when it is more likely than not (that is, a likelihood of more than 50 percent) that a goodwill impairment exists. In considering whether it is more likely than not that a goodwill impairment exists, an entity shall evaluate, using the process described in paragraphs 350-20-35-3F through 35-3G, whether there are adverse qualitative factors, including the examples of events and circumstances provided in paragraph 350-20-35-3C(a) through (g) [see paragraph 3.07 of this guide]. In evaluating whether it is more likely than not that the goodwill of a reporting unit with a zero or negative carrying amount is impaired, an entity also should take into consideration whether there are significant differences between the carrying amount and the estimated fair value of its assets and liabilities, and the existence of significant unrecognized intangible assets.

2.08 FASB ASC 350-20-35-9 states that “[t]he second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of reporting unit goodwill with the carrying amount of that goodwill.” As indicated in FASB ASC 350-20-35-2, “[t]he fair value of goodwill can be measured only as a residual and cannot be measured directly.”² According to FASB ASC 350-20-35-14, the implied fair value of goodwill should be determined in the same manner as the amount of goodwill recognized in a business combination. That is, an entity should assign the fair value of a reporting unit, as measured in step 1, to all of the assets and liabilities of that reporting unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination.³ FASB ASC 350-20-35-11 indicates that “[i]f the carrying amount of reporting unit goodwill exceeds the implied fair value of that goodwill, an impairment loss shall be recognized in an amount equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill.”

2.09 Paragraphs 12–13 of FASB ASC 350-20-35 provide that

35-12 After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill shall be its new accounting basis.

35-13 Subsequent reversal of a previously recognized goodwill impairment loss is prohibited once the measurement of that loss is recognized.

Identification of Reporting Units

2.10 Paragraphs 33–38 of FASB ASC 350-20-35 and paragraphs 1–9 of FASB ASC 350-20-55 provide guidance on identification of reporting units. The FASB ASC Master Glossary defines *reporting unit* as “[t]he level of reporting at which goodwill is tested for impairment. A reporting unit is an operating segment or one level below an operating segment (also known as a component).”

² The task force notes that although goodwill is not measured directly for financial reporting purposes, some components of goodwill, such as an acquired assembled workforce intangible asset, may be subject to direct fair value measurement.

³ This allocation process used to determine the implied fair value of goodwill is performed only for the purposes of testing goodwill for impairment; an entity should not write up or write down a recognized asset or liability, nor should it recognize a previously unrecognized asset.

The identification of reporting units is a process unique to each entity beginning with that entity's operating segments as identified under FASB ASC 280, *Segment Reporting*. An entity that is not required to report segment information in accordance with FASB ASC 280 is nonetheless required to test goodwill for impairment at the reporting unit level. That entity should use the guidance in paragraphs 1–9 of FASB ASC 280-10-50 to determine its operating segments for purposes of determining its reporting units.

2.11 As indicated in FASB ASC 350-20-35-34

[a] component of an operating segment is a reporting unit if the component constitutes a business or a nonprofit activity for which discrete financial information is available and segment management, as that term is defined in paragraph 280-10-50-7, regularly reviews the operating results of that component.

2.12 FASB ASC 350-20-55-3 states that “[t]he determination of whether a component constitutes a business or a nonprofit activity requires judgment based on specific facts and circumstances.” The FASB ASC Master Glossary defines *business* as

[a]n integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs, or other economic benefits directly to investors or other owners, members, or participants. Additional guidance on what a business consists of is presented in paragraphs 805-10-55-4 through 55-9.

The FASB ASC Master Glossary defines *nonprofit activity* as

[a]n integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing benefits, other than goods or services at a profit or profit equivalent, as a fulfillment of an entity's purpose or mission (for example, goods or services to beneficiaries, customers, or members). As with a not-for-profit entity, a nonprofit activity possesses characteristics that distinguish it from a business or a for-profit business entity.

Throughout the remainder of this guide, the term *business* also includes a nonprofit activity.

2.13 FASB ASC 350-20-55-4 states that

[t]he term *discrete financial information* should be applied in the same manner that it is applied in determining operating segments in accordance with paragraph 280-10-50-1. That guidance indicates that it is not necessary that assets be allocated for a component to be considered an operating segment (that is, no balance sheet is required). Thus, discrete financial information can constitute as little as operating information. Therefore, in order to test goodwill for impairment in accordance with this Subtopic [FASB ASC 350-20], an entity may be required to assign assets and liabilities to reporting units (consistent with the guidance in paragraphs 350-20-35-39 through 35-40).

2.14 FASB ASC 350-20-55-5 states that

[s]egment management, as defined in paragraphs 280-10-50-7 through 50-8, is either a level below or the same level as the chief operating decision maker. According to Topic 280, a segment manager is directly accountable to and maintains regular contact with the chief operating

decision maker to discuss operating activities, financial results, forecasts, or plans for the segment. The approach used in this Subtopic [FASB ASC 350-20] to determine reporting units is similar to the one used to determine operating segments; however, this Subtopic [FASB ASC 350-20] focuses on how operating segments are managed rather than how the entity as a whole is managed; that is, reporting units should reflect the way an entity manages its operations.

2.15 FASB ASC 350-20-35-35 states that “two or more components of an operating segment shall be aggregated and deemed a single reporting unit if the components have similar economic characteristics.” Paragraphs 6–9 of FASB ASC 350-20-55 provide implementation guidance for evaluating whether two components have similar economic characteristics. According to FASB ASC 350-20-55-6, “[e]valuating whether two components have similar economic characteristics is a matter of judgment that depends on specific facts and circumstances. That assessment should be more qualitative than quantitative.”

2.16 FASB ASC 350-20-55-7 provides that in determining whether the components of an operating segment have similar economic characteristics, all of the following factors in FASB ASC 280-10-50-11 should be considered:

- a.* The nature of the products and services
- b.* The nature of the production processes
- c.* The type or class of customer for their products and services
- d.* The methods used to distribute their products or provide their services
- e.* If applicable, the nature of the regulatory environment, for example, banking, insurance, or public utilities

FASB ASC 350-20-55-7 goes on to say that

[h]owever, every factor need not be met in order for two components to be considered economically similar. In addition, the determination of whether two components are economically similar need not be limited to consideration of the factors described in that paragraph [FASB ASC 280-10-50-11]. In determining whether components should be combined into one reporting unit based on their economic similarities, factors that should be considered in addition to those in that paragraph [FASB ASC 280-10-50-11] include but are not limited to, the following:

- a.* The manner in which an entity operates its business or non-profit activity and the nature of those operations
- b.* Whether goodwill is recoverable from the separate operations of each component business (or nonprofit activity) or from two or more component businesses (or nonprofit activities) working in concert (which might be the case if the components are economically interdependent)
- c.* The extent to which the component businesses (or nonprofit activities) share assets and other resources, as might be evidenced by extensive transfer pricing mechanisms
- d.* Whether the components support and benefit from common research and development projects.

The fact that a component extensively shares assets and other resources with other components of the operating segment may be an indication that the component either is not a business or nonprofit activity or it may be economically similar to those other components.

2.17 FASB ASC 350-20-55-8 states that

[c]omponents that share similar economic characteristics but relate to different operating segments may not be combined into a single reporting unit. For example, an entity might have organized its operating segments on a geographic basis. If its three operating segments (Americas, Europe, and Asia) each have two components (A and B) that are dissimilar to each other but similar to the corresponding components in the other operating segments, the entity would not be permitted to combine component A from each of the operating segments to make reporting unit A.

2.18 The task force notes that the number of reporting units identified by an entity for purposes of testing goodwill for impairment is subject to change if underlying facts and circumstances change. For example, a change in an entity's identified operating segments might result in a change in the number of identified reporting units. Also, a change in the economic characteristics of a component might result in aggregation of that component with another component or disaggregation of that component from another component. See paragraph 2.44 for discussion of a reorganization of an entity's reporting structure.

Assigning Assets and Liabilities to a Reporting Unit

2.19 The carrying amount of a reporting unit equals the total assets (including goodwill) less the total liabilities assigned to that reporting unit. The process of assigning goodwill to a reporting unit differs from the process of assigning assets (other than goodwill) and liabilities. See paragraphs 2.38–.39 for discussion of assigning goodwill to a reporting unit.

2.20 FASB ASC 350 addresses the issue of when to perform step 2 of the goodwill impairment test for reporting units with zero or negative carrying amounts. Paragraph BC4 in the "Basis for Conclusions" section of Accounting Standards Update (ASU) No. 2010-28, *Intangibles—Goodwill and Other (Topic 350): When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts (a consensus of the FASB Emerging Issues Task Force)*,⁴ explains that the Emerging Issues Task Force (EITF) evaluated different approaches for calculating the carrying amount of reporting units. The EITF decided not to mandate an approach for calculating the carrying amount of a reporting unit for purposes of step 1 of the goodwill impairment test. As a result, this guide does not promote a particular approach.

2.21 When a reporting unit's carrying amount is based on an equity approach, all liabilities, including debt, are available for assignment to the reporting unit. When a reporting unit's carrying amount is based on an

⁴ Paragraph BC4 and other paragraphs from the "Background Information and Basis for Conclusions" section of Accounting Standards Update (ASU) No. 2010-28, *Intangibles—Goodwill and Other (Topic 350): When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts (a consensus of the FASB Emerging Issues Task Force)* were not codified in FASB ASC; however, the task force believes these paragraphs provide helpful guidance and, therefore, decided to incorporate them in this guide.

enterprise approach, debt is excluded from the liabilities available for assignment to the reporting unit when determining the carrying amount. In situations in which the fair value of debt approximates its carrying amount, using either approach would not be expected to affect the goodwill impairment test. When no debt has been assigned to the reporting unit, the carrying amount of the reporting unit will be the same using either approach. See paragraph 4.20 for discussion on the fair value of debt.

2.22 Often, the process of identifying reporting units as discussed in paragraphs 2.10–.18 will result in more than one reporting unit being identified for an entity. The following discussion of assigning assets and liabilities to reporting units applies when an entity has identified more than one reporting unit. If only one reporting unit is identified, the assignment of assets and liabilities depends on the approach used for calculating the carrying amount of a reporting unit, as discussed in paragraphs 2.20–.21. For entities with multiple reporting units, only those assets and liabilities that meet the criteria for assignment (listed in paragraph 2.24) need to be assigned to each of the individual reporting units. Regardless of whether an entity has identified multiple reporting units or a single reporting unit, it would need to ensure that the carrying amount of the reporting unit and the fair value of the reporting unit are determined in a consistent manner (see paragraph 2.27).

2.23 The process of assigning assets and liabilities to reporting units is used only for the purpose of goodwill impairment testing. Such information is usually maintained on separate detailed schedules as part of the accounting records that support the financial statement balances and conclusions reached as a result of impairment testing.

2.24 FASB ASC 350-20-35-39 states that

[f]or the purpose of testing goodwill for impairment, acquired assets and assumed liabilities shall be assigned to a reporting unit as of the acquisition date if both of the following criteria are met:

- a. The asset will be employed in or the liability relates to the operations of a reporting unit.
- b. The asset or liability will be considered in determining the fair value of the reporting unit.

2.25 The carrying amount of an asset or liability will often differ from its fair value. Consequently, the decisions about assignments of a particular asset or liability can affect the result of the goodwill impairment test.

2.26 The task force notes that the evaluation of the two criteria for assigning assets and liabilities to a reporting unit stated in paragraph 2.24 requires the exercise of judgment with an additional level of judgment necessary when an asset or a liability is employed in or relates to the operations of two or more reporting units such that a reasonable method of assigning that asset or liability is required.

2.27 In developing the assignment criteria noted in paragraph 2.24, FASB concluded that, “the objective of the assignment process should be to ensure that the assets and liabilities that are assigned to a reporting unit are the same net assets that are considered in determining the fair value of that

unit—an ‘apples-to-apples’ comparison.”⁵ The task force believes that this concept extends to situations in which a reporting unit benefits from unrecognized assets or is burdened by unrecognized liabilities; in these cases, the fair value measurement should consider these unrecognized items.

2.28 Consistent with the objective described in paragraph 2.27, an entity needs to monitor and adjust for changes in the assets and liabilities assigned to reporting units. For example, an asset no longer employed in the operations of a reporting unit would not be assigned to that reporting unit and would not be considered when measuring the fair value of the reporting unit.

2.29 Some assets or liabilities may be employed in or relate to the operations of multiple reporting units—a shared asset or liability. FASB ASC 350-20-35-40 states that

[t]he methodology used to determine the amount of those assets or liabilities to assign to a reporting unit shall be reasonable and supportable and shall be applied in a consistent manner. For example, assets and liabilities not directly related to a specific reporting unit, but from which the reporting unit benefits, could be assigned according to the benefit received by the different reporting units (or based on the relative fair values of the different reporting units).

2.30 The following examples developed by the task force illustrate the evaluation of the two criteria for assigning assets and liabilities to a reporting unit for an entity with multiple reporting units: (1) when the asset or liability is not shared by the reporting units and (2) when the asset or liability is shared by the reporting units. Because facts and circumstances will vary by entity, conclusions about the assignment method applied also will vary.

**Example 2-1—Asset Not Shared by Reporting Units—Building
Building Determined to Meet the Criteria for Assignment**

Entity A has two reporting units (RU1 and RU2). RU1 is the sole user of a building owned by Entity A as its manufacturing facility. Entity A determined that the building should be assigned to RU1 because (1) the asset relates to the operations of RU1 and (2) the asset would be considered in determining the fair value of RU1.

Building Determined to Not Meet the Criteria for Assignment

Entity B has two reporting units (RU1 and RU2). Previously, Entity B operated a manufacturing facility unrelated to either RU1 or RU2 that was idled when the product produced at that facility was discontinued. Entity B intends to sell the facility and has it classified as held for sale. Entity B has determined that the building should not be assigned to either RU1 or RU2 because the asset does not relate to the operations of either reporting unit.

⁵ This is an excerpt from paragraph B116 of FASB Statement No. 142, *Goodwill and Other Intangible Assets*. Paragraph B116 of FASB Statement No. 142 was not codified in FASB ASC; however, the task force believes that it provides helpful guidance and, therefore, decided to incorporate it in this guide.

Example 2-2—Liability Not Shared by Reporting Units—Warranty Obligation***Warranty Obligation Determined to Meet the Criteria for Assignment***

Entity C has two reporting units (RU1 and RU2). RU1 manufactures a product for sale to third parties. In connection with each product sale by RU1, Entity C provides a limited warranty regarding the functionality of the product, thereby incurring a warranty obligation. Entity C has accrued, at the corporate level, a liability for warranty obligation. Entity C determined that the warranty obligation should be assigned entirely to RU1 because (1) the liability relates to the operations of RU1 and (2) the liability would be considered in determining the fair value of RU1.

Warranty Obligation Determined to Not Meet the Criteria for Assignment

Entity D has two reporting units (RU1 and RU2). Previously, Entity D operated a manufacturing facility unrelated to either RU1 or RU2 that produced a product upon the sale of which Entity D provided a limited warranty regarding its functionality. Entity D has accrued at the corporate level a liability for the warranty obligation. Entity D has determined that the warranty obligation should not be assigned to either RU1 or RU2 as the liability does not relate to the operations of either reporting unit.

Example 2-3—Asset Shared by Reporting Units—Trade Name Recognized at the Corporate Level

Entity E has an acquired trade name, the value of which is recognized at the corporate level. Entity E has two reporting units (RU1 and RU2), each of which utilize the trade name to support all of its revenues without a charge from Entity E. Entity E had determined that the trade name relates to both reporting units and that the trade name would be considered in determining the fair value of both reporting units.

To illustrate different methodologies that could be used in practice to assign a shared trade name to multiple reporting units, assume that the trade name has a carrying amount of \$4 million. Also, assume EBITDA is \$3 million for RU1 and \$1 million for RU2 and that the fair value of RU1 is \$16 million and \$4 million for RU2, each measured assuming RU1 and RU2 have no cost of using the trade name. If RU1 or RU2 were required to rent the trade name, a market royalty rate could be determined

Assign Based on an Assumed Rental of the Trade Name by Each Reporting Unit

This methodology would result in neither reporting unit being assigned all nor a portion of the carrying amount of the trade name; each would be assumed to have no ownership of the trade name, and each would have to rent it from its owner. Under this methodology, if a discounted cash flow method is used to measure the fair value of the reporting unit, there would be a cash outflow related to the use of the trade name by each reporting unit based on a market royalty rate.

The task force notes that when applying a market royalty rate for the use of a trade name, one would need to consider whether the costs related to supporting the trade name (for example, advertising and marketing) are included at the reporting unit level or at the corporate level (that is, outside of the reporting unit). Under this methodology, because the reporting units are

assumed not to own the trade name but to rent it, the reporting units would not be expected to be responsible for the costs related to supporting the trade name and, therefore, such costs would not be included at the reporting unit level. If these costs are included at the reporting unit level, this fact would need to be considered when selecting the royalty rate so as to avoid double counting.

The task force observes that the methodology in this example is frequently used in practice because it is often assumed that reporting units sharing a trade name would be sold without ownership of the trade name. See note 4 of schedule 4.3 for illustration.

Assign Based on an Assumed Ownership of the Trade Name by One Reporting Unit and Rental of the Trade Name by the Other Reporting Unit

This methodology would result in one reporting unit being assigned the full carrying amount of the trade name. The fair value of the reporting unit assumed to own the trade name would include a cash inflow based on a market royalty rate related to the use (rental) of the trade name by the other reporting unit. Similarly, the fair value of the reporting unit not assigned the carrying amount of the trade name would include a cash outflow related to the use of the trade name based on a market royalty rate.

Under this methodology, the costs related to supporting the trade name would be assigned to the reporting unit assumed to own the trade name; no such costs would be allocated to the reporting unit assumed to rent the trade name.

The task force believes that use of this methodology would be consistent with the assumption that one reporting unit would transfer with ownership of the trade name while all others would not, which might be the case if one reporting unit is the predominant user of the trade name.

The task force noted the following additional methodologies, although not frequently observed in practice, that might be offered based on the general guidance in Financial Accounting Standards Board *Accounting Standards Codification* 350-20-35-40 (see paragraph 2.29).

Assign Based on Benefits Received

Assuming that reporting unit EBITDA is an appropriate measure of the benefits received, this methodology would result in the assignment of the carrying amount of the trade name as \$3 million to RU1 and \$1 million to RU2. Under this methodology, if a discounted cash flow method is used to measure the fair value of the reporting unit, there would be no cash outflow related to the use of the trade name because it would be assumed to be owned by each reporting unit. Also, the costs related to supporting the trade name would need to be considered and, in this situation, they would be allocated between RU1 and RU2 because both reporting units benefit from the use of the trade name.

Assign Based on Relative Fair Values of the Reporting Units

This methodology would result in the assignment of the carrying amount of the trade name as \$3.2 million to RU1 and \$0.8 million to RU2. Under this methodology, if a discounted cash flow method is used to measure the fair value of the reporting unit, there would be no cash outflow related to the use of the trade name because it would be assumed to be owned by each reporting unit. The task force believes that this methodology would only be appropriate when the reporting units benefit from the trade name in direct proportion to their fair values. Also, the costs related to supporting the trade name would need to be considered and, in this situation, they would be allocated between RU1 and RU2 because both reporting units benefit from the use of the trade name.

Example 2-4—Liability Shared By Reporting Units—Pension Obligation Recognized at the Corporate Level

Entity F has a pension liability arising under a pension plan operated at the corporate level. Entity F has two reporting units (RU1 and RU2) and all employees participate in the pension plan. Entity F has determined that the pension liability relates to both reporting units and that the pension liability would be considered in determining the fair value of both reporting units.

When pension items are assigned to more than one reporting unit, the assignment may be based on payroll expense, headcount, or other current employee measures, provided such measures are an appropriate reflection of the relative participation of each reporting unit in the pension plan. When pension items are assigned to more than one reporting unit, the funding of those pension items would need to be considered in the valuation of each reporting unit.

Assigning Assets and Liabilities to a Reporting Unit—Additional Considerations**Debt Recognized at the Corporate Level**

2.31 The carrying amount of a reporting unit is calculated as the difference between the total assets and total liabilities assigned to the reporting unit. As discussed in paragraphs 2.20–.21, when a reporting unit’s carrying amount is based on an equity approach, debt, like any other liability, is available for assignment to a reporting unit based on the criteria listed in paragraph 2.24. In cases in which no debt has been assigned to the reporting unit, the carrying amount using either the equity approach or the enterprise approach will be the same. The task force notes that the treatment of debt may be different across industries. For example, financial institutions may treat debt as part of operating liabilities, in which case the debt would be considered for assignment to a reporting unit under both the enterprise and equity approaches.

Deferred Taxes Related to Assets and Liabilities of a Reporting Unit

2.32 A deferred tax liability or asset is recognized for differences between the assigned values and the income tax bases of recognized assets and liabilities. FASB ASC 350-20-35-7 provides that “[i]n determining the carrying amount of a reporting unit, deferred income taxes shall be included in the carrying amount of the reporting unit, regardless of whether the fair value of the reporting unit will be determined assuming it would be bought or sold in a taxable or nontaxable transaction.” In other words, if an asset or liability is assigned to a specific reporting unit any related deferred taxes are also assigned to the same reporting unit.

Cumulative Translation Adjustment

2.33 When a reporting unit includes or is entirely a foreign entity with cumulative translation adjustment (CTA) amounts present at the corporate level, it is necessary to evaluate whether all or a portion of that CTA should be assigned to the reporting unit. In making this evaluation, FASB ASC 830-30-45-13 provides, when addressing impairment testing in general, that an entity that has committed to a plan that will cause the CTA for an equity method investment or a consolidated investment in a foreign entity to be reclassified to earnings should include the CTA as part of the carrying amount of the

investment when evaluating that investment for impairment. Otherwise, the carrying amount of the reporting unit should include assets and liabilities at their currently translated amounts with the balance of the net assets, excluding the CTA amounts, recorded as equity.

Example 2-5—Consideration of Cumulative Translation Adjustment in Reporting Units

Assume that a foreign subsidiary that is a reporting unit that is not committed to a plan of sale that will cause the CTA amount to be reclassified to earnings has the following balances after currency translation by its U.S. parent company (in millions):

	<i>Debit / (Credit)</i>
Total assets (including goodwill of currency units [CU] 500)	CU 2,000
Total liabilities	(850)
Total net assets	<u>CU 1,150</u>
Paid-in capital and retained earnings	CU (1,080)
Cumulative translation adjustment	<u>(70)</u>
Total equity	<u>CU (1,150)</u>

Analysis: The carrying amount of this reporting unit for purposes of step 1 of the goodwill impairment test would be currency units (CU) 1,150 million, which represents the net assets of the reporting unit at their currently translated amounts. For step 2 of the goodwill impairment test, the carrying amount of the reporting unit's goodwill would be at the translated amount of CU 500 million, and the implied fair value of goodwill would be determined based on the reporting unit's fair value at the impairment testing date.

Contingent Consideration Arrangements

2.34 FASB ASC 805 requires that the acquisition-date fair value of contingent consideration be recognized as part of the consideration transferred in exchange for the acquiree. In periods subsequent to an acquisition, FASB ASC 805-30-35-1 states that

[t]he acquirer shall account for changes in the fair value of contingent consideration that are not measurement period adjustments as follows:

- a. Contingent consideration classified as equity shall not be remeasured and its subsequent settlement shall be accounted for within equity.
- b. Contingent consideration classified as an asset or a liability shall be remeasured to fair value at each reporting date until the contingency is resolved. The changes in fair value shall be recognized in earnings unless the arrangement is a hedging instrument for which Topic 815 requires the changes to be initially recognized in other comprehensive income.

2.35 As discussed in paragraph 2.25, when the fair value of an asset or liability differs from its carrying amount, the inclusion or exclusion of that asset or liability from a reporting unit can affect the result of step 1 of the goodwill

impairment test. The criteria in FASB ASC 350-20-35-39 should be considered to determine if a liability-classified or asset-classified contingent consideration arrangement should be assigned to a reporting unit for goodwill impairment testing purposes.

2.36 The task force believes that if the reporting unit is obligated to pay contingent consideration or the right to receive contingent consideration is held by an entity that is included in the reporting unit, then the contingent consideration generally would be assigned to that reporting unit.

2.37 The task force further believes circumstances could exist for which it may be appropriate to assign contingent consideration to a reporting unit, even though another entity within the consolidated group is the legal counterparty to the arrangement. This may be the case when a reporting unit contains the acquired business that gave rise to the contingent consideration arrangement, and it is expected that a market participant would assume such obligation or right upon acquisition of the reporting unit.

Assigning Recorded Goodwill to Reporting Units

2.38 FASB ASC 350-20-35-41 states that

[f]or the purpose of testing goodwill for impairment, all goodwill acquired in a business combination shall be assigned to one or more reporting units as of the acquisition date. Goodwill shall be assigned to reporting units of the acquiring entity that are expected to benefit from the synergies of the combination even though other assets or liabilities of the acquired entity may not be assigned to that reporting unit.

2.39 FASB ASC 350-20-35-41 further states that “[t]he methodology used to determine the amount of goodwill to assign to a reporting unit shall be reasonable and supportable and shall be applied in a consistent manner.” FASB ASC 350-20-35-42 states that, “[i]n concept, the amount of goodwill assigned to a reporting unit would be determined in a manner similar to how the amount of goodwill recognized in a business combination is determined.”

Assigning Recorded Goodwill to Reporting Units— Additional Considerations

Reporting Units With Noncontrolling Interest

2.40 FASB ASC 805-20-30-1 requires the acquirer in a business combination to measure any noncontrolling interest in the acquiree at its fair value at the acquisition date. FASB ASC 805-20-30-8 states that

[t]he fair values of the acquirer’s interest in the acquiree and the noncontrolling interest on a per-share basis might differ. The main difference is likely to be the inclusion of a control premium in the per-share fair value of the acquirer’s interest in the acquiree or, conversely, the inclusion of a discount for lack of control (also referred to as a noncontrolling interest discount) in the per-share fair value of the noncontrolling interest if market participants would take into account such a premium or discount when pricing the noncontrolling interest.

Refer to paragraphs 4.10–.11 for additional discussion of control premium.

2.41 If a reporting unit consists in whole or in part of a subsidiary of a parent that is less than wholly owned, it is necessary to differentiate and separately track goodwill related to the controlling interest and goodwill, if any, related to the noncontrolling interest. Such identification is not necessary when testing goodwill for impairment, as goodwill is tested in total for each reporting unit. However, such identification is necessary if an impairment of goodwill is identified, as this impairment will be attributed to the parent and any noncontrolling interest, as discussed in paragraph 2.65.

2.42 The following example illustrates how to measure (1) goodwill on the acquisition date for the acquirer and (2) the portion of that goodwill attributable to the noncontrolling interest. Assume that there is no discount for lack of control and that Entity X acquires an 80 percent interest in Entity Y for \$1,000,000 with identifiable net assets equal to \$800,000.

	<i>Measurement of Goodwill by Acquirer</i>	<i>Measurement of Goodwill Attributable to Noncontrolling Interest</i>
(A) Consideration transferred ⁶	\$1,000,000	
(B) Fair value of noncontrolling interest in the acquiree ⁷		
[(A / 0.80) – A]	250,000	\$250,000
(C) A + B	1,250,000	
(D) Identifiable net assets ⁸	800,000	
(E) Identifiable net assets attributable to noncontrolling interest [D × 0.20]		160,000
(F) Goodwill recognized [C – D]	450,000	
Goodwill attributable to the noncontrolling interest [B – E]		90,000

2.43 The following example illustrates how to measure (1) goodwill on the acquisition date for the acquirer and (2) the portion of that goodwill attributable to the noncontrolling interest in situations in which a discount for lack of control is appropriate for the noncontrolling interest. Assume that there is a 10 percent discount for lack of control and that Entity X acquires an 80 percent interest in Entity Y for \$1,000,000 with identifiable net assets equal to \$800,000.

⁶ The consideration transferred is measured in accordance with FASB ASC 805, *Business Combinations*, which generally requires acquisition-date fair value of assets transferred, liabilities incurred, and equity interests issued.

⁷ In this example, it is assumed there are no differences between the controlling and noncontrolling interests for purposes of valuing the noncontrolling interest.

⁸ Amount represents the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed measured in accordance with FASB ASC 805.

	<i>Measurement of Goodwill by Acquirer</i>	<i>Measurement of Goodwill Attributable to Noncontrolling Interest</i>
(A) Consideration transferred ⁹	\$1,000,000	
(B) Fair value of noncontrolling interest in the acquiree ¹⁰ [[$(A / 0.80) - A$] \times 0.90]	225,000	\$225,000
(C) A + B	1,225,000	
(D) Identifiable net assets ¹¹	800,000	
(E) Identifiable net assets attributable to noncontrolling interest [D \times 0.20]		160,000
(F) Goodwill recognized [C - D]	425,000	
Goodwill attributable to the noncontrolling interest [B - E]		65,000

Reorganization of Reporting Structure

2.44 As discussed in paragraph 2.18, an entity needs to monitor and adjust for changes in its identified reporting units. FASB ASC 350-20-35-45 states that

[w]hen an entity reorganizes its reporting structure in a manner that changes the composition of one or more of its reporting units, the guidance in paragraphs 350-20-35-39 through 35-40 [see paragraphs 2.24 and 2.29 of this guide] shall be used to reassign assets and liabilities to the reporting units affected. However, goodwill shall be reassigned to the reporting units affected using a relative fair value allocation approach similar to that used when a portion of a reporting unit is to be disposed of [see paragraph 2.49 of this guide].

The task force believes that a reorganization is an event that may require goodwill impairment testing (see paragraphs 3.07–.09 for examples of events and circumstances that might require an impairment test of goodwill between annual dates).

⁹ See footnote 6 in paragraph 2.42.

¹⁰ Discount for lack of control (10 percent) applies to per-share basis of the noncontrolling interest in the acquiree. In this example, it is assumed that the difference between the controlling interest and the noncontrolling interest is limited to the discount for lack of control.

¹¹ See footnote 8 in paragraph 2.42.

Goodwill Impairment Testing by a Subsidiary

2.45 As stated in FASB ASC 350-20-35-48

[a]ll goodwill recognized by a public or nonpublic subsidiary (subsidiary goodwill) in its separate financial statements that are prepared in accordance with generally accepted accounting principles (GAAP) shall be accounted for in accordance with this Subtopic [FASB ASC 350-20]. Subsidiary goodwill shall be tested for impairment at the subsidiary level using the subsidiary's reporting units. If a goodwill impairment loss is recognized at the subsidiary level, goodwill of the reporting unit or units (at the higher consolidated level) in which the subsidiary's reporting unit with impaired goodwill resides must be tested for impairment if the event that gave rise to the loss at the subsidiary level would more likely than not reduce the fair value of the reporting unit (at the higher consolidated level) below its carrying amount (see paragraph 350-20-35-3C(f)). Only if goodwill of that higher-level reporting unit is impaired would a goodwill impairment loss be recognized at the consolidated level.

2.46 For example, when a subsidiary is a single reporting unit from the perspective of the consolidated entity, the subsidiary may have two or more of its own reporting units for purposes of testing its goodwill for impairment. If such a subsidiary recognizes a goodwill impairment loss within one of its two reporting units, an impairment loss may not be present at the consolidated level due to the consideration of the subsidiary as a whole as a reporting unit by the consolidated entity.

2.47 If a reporting unit at the higher consolidated level encompasses a reporting unit or units of a subsidiary, certain assumptions utilized to determine the fair value of the higher-level reporting unit may not be appropriate to use at the subsidiary level based on differences in business alignment. For example, if the market approach was utilized to determine the fair value of a higher-level reporting unit which is comprised of multiple businesses, it may not be appropriate to apply the same assumptions to a subsidiary's reporting unit which has differing businesses.

2.48 FASB ASC 350-20-35-49 states that “[i]f testing at the consolidated level leads to an impairment loss, that loss shall be recognized at that level separately from the subsidiary's loss.”

Disposal of All or a Portion of a Reporting Unit

2.49 Paragraphs 1–6 of FASB ASC 350-20-40 state that

40-1 When a reporting unit is to be disposed of in its entirety, goodwill of that reporting unit shall be included in the carrying amount of the reporting unit in determining the gain or loss on disposal.

40-2 When a portion of a reporting unit that constitutes a business (see Section 805-10-55) is to be disposed of, goodwill associated with that business shall be included in the carrying amount of the business in determining the gain or loss on disposal.

40-3 The amount of goodwill to be included in that carrying amount shall be based on the relative fair values of the business to be disposed of and the portion of the reporting unit that will be retained. For example, if a business is being sold for \$100 and the fair value of the reporting unit excluding the business being sold is \$300, 25

percent of the goodwill residing in the reporting unit would be included in the carrying amount of the business to be sold.

40-4 However, if the business to be disposed of was never integrated into the reporting unit after its acquisition and thus the benefits of the acquired goodwill were never realized by the rest of the reporting unit, the current carrying amount of that acquired goodwill shall be included in the carrying amount of the business to be disposed of.

40-5 That situation might occur when the acquired business is operated as a standalone entity or when the business is to be disposed of shortly after it is acquired.

40-6 Situations in which the acquired business is operated as a standalone entity are expected to be infrequent because some amount of integration generally occurs after an acquisition.

2.50 See paragraph 2.56 for a discussion of goodwill impairment testing when only a portion of goodwill is allocated to a business to be disposed of.

When to Test Goodwill for Impairment

2.51 FASB ASC 350-20-35-28 states that

[g]oodwill of a reporting unit shall be tested for impairment on an annual basis and between annual tests in certain circumstances (see paragraph 350-20-35-30 [also see paragraphs 2.54–.55 of this guide]). The annual goodwill impairment test may be performed any time during the fiscal year provided the test is performed at the same time every year. Different reporting units may be tested for impairment at different times.

Changing Annual Test Date

2.52 Because goodwill should be tested for impairment at the same time every year, the selection of the date to test goodwill for impairment at each reporting unit represents a method of applying an accounting principle that, if changed, would require justification of the change on the basis that it is preferable as provided in FASB ASC 250, *Accounting Changes and Error Corrections*. A Securities and Exchange Commission (SEC) registrant making a change in the annual testing date for impairment of goodwill must also consider SEC reporting requirements for accounting changes. Specifically, Rule 10-01(b)(6) of Regulation S-X requires a registrant making an accounting change to disclose the date of and reason for the change. Additionally, a registrant making an accounting change is required to file a letter from the registrant's independent registered public accountant indicating whether or not the change is to an alternative principle which, in the independent registered public accountant's judgment, is preferable under the circumstances.

2.53 If an entity elects to change the annual testing date for goodwill impairment, the task force believes that no more than 12 months should elapse between the tests to ensure goodwill is tested for impairment at least annually. Additionally, the task force believes the change in testing dates should not be made with the intention of accelerating or delaying an impairment charge. When an entity changes its goodwill impairment testing dates, it should consider the requirements of FASB ASC 250-10.

Testing for Impairment Between Annual Test Dates

2.54 FASB ASC 350-20-35-30 states that “[g]oodwill of a reporting unit shall be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.”¹² The monitoring for the occurrence of relevant events and circumstances is specific to each reporting unit. Although some events and circumstances may affect more than one reporting unit, others may be specific to a single reporting unit.

2.55 The task force believes that more than one test of goodwill for impairment may be required for a reporting unit within a reporting period if there is more than one event or circumstance requiring a test or if the annual testing date of goodwill occurs within a reporting period and is different from the date of the event or circumstance requiring an interim test.

Testing Goodwill Remaining in a Reporting Unit Upon Disposal of a Portion of a Reporting Unit

2.56 FASB ASC 350-20-40-7 states that “[w]hen only a portion of goodwill is allocated to a business to be disposed of, the goodwill remaining in the portion of the reporting unit to be retained shall be tested for impairment in accordance with paragraphs 350-20-35-3A through 35-19 using its adjusted carrying amount.” See paragraph 2.49 for discussion of the amount of goodwill to be included in the carrying amount when all or a portion of a reporting unit is disposed of.

Order of Impairment Testing

2.57 In addition to goodwill, a reporting unit will likely contain other assets that are subject to separate testing for impairment. For example, a reporting unit may contain intangible assets determined to have an indefinite life as well as asset groups subject to impairment testing under FASB ASC 360, *Property, Plant, and Equipment*. When a reporting unit is not held for sale, consistent with FASB ASC 360-10-35-27, the impairment testing should be performed in the following order:

- Adjust the carrying amounts of any assets (such as accounts receivable and inventory) and liabilities (such as accounts payable, long-term debt, and asset retirement obligations) not covered by FASB ASC 360-10 that are included in an asset group in accordance with other applicable GAAP.
- Test for impairment and adjust carrying amounts of indefinite-lived intangible asset(s) that are included in an asset group under FASB ASC 350-30.
- Test long-lived assets (asset group) and amortizable intangible assets under FASB ASC 360-10.
- Test goodwill of a reporting unit that includes the aforementioned assets under FASB ASC 350-20.

¹² The examples of events and circumstances considered in an interim evaluation are the same as those used in the qualitative assessment. Examples of such events and circumstances are listed in FASB ASC 350-20-35-3C and reproduced in paragraph 3.07 of this guide.

This is because it is necessary to make any required adjustments to the carrying amount of the reporting unit prior to the performance of the goodwill impairment test.

Previous Fair Value Measurements of a Reporting Unit

2.58 The provisions of FASB ASC 350-20 no longer allow entities to carry forward the fair value of a reporting unit for goodwill impairment when performing a step 1 test. However, FASB ASC 350-20-35-3F states that “[i]f an entity has a recent fair value calculation for a reporting unit, it also should include as a factor in its consideration the difference between the fair value and the carrying amount in reaching its conclusion about whether to perform the first step of the goodwill impairment test.” See chapter 3 for further discussion.

Step 2 of Goodwill Impairment Test

2.59 As described in paragraph 2.06, if a reporting unit subject to goodwill impairment testing has an estimated fair value in excess of its carrying amount and the carrying amount is greater than zero, step 2 of the test is not performed. If instead, the estimated fair value of a reporting unit is less than its carrying amount, step 2 would be performed.

2.60 In the second step of the goodwill impairment test, the implied fair value of goodwill is measured as the excess, if any, of the fair value of the reporting unit measured in step 1, over the net amounts of the identifiable assets and liabilities assumed (including any deferred tax liabilities arising from a nontaxable transaction in step 1), measured at the test date in accordance with FASB ASC 805. This includes determining the fair values of any previously unrecognized intangible assets. The balance remaining after assigning amounts to all of the reporting unit’s recorded and unrecorded assets and liabilities represents the implied fair value of its goodwill.

2.61 This process is performed only for the purpose of measuring potential goodwill impairment and does not result in a change in basis of the recognized net assets or in the recognition of any unrecognized assets of the reporting unit.

2.62 When performing step 2, an entity needs to consider and consistently apply any assumptions developed in step 1. For example, when determining the fair value of a reporting unit in step 1, assumptions are made about whether the unit could be bought or sold in a nontaxable or taxable transaction. If a nontaxable transaction is assumed in step 1, then in step 2 the entity uses its existing income tax bases (and recalculates deferred tax balances for any difference between those income tax bases and the fair values of the assets and liabilities determined in step 2). If a taxable transaction is assumed in step 1 the entity should assume new income tax bases. (See paragraphs 4.92–93; schedules 4.15–4.16.)

2.63 If the implied fair value of goodwill is less than its carrying amount, an impairment loss is recognized equal to that difference. The adjusted carrying amount of goodwill becomes its new accounting basis that will be used in future impairment tests. The loss cannot exceed the carrying amount of goodwill. As provided in FASB ASC 350-20-35-13, “[s]ubsequent reversal of a previously recognized goodwill impairment loss is prohibited once the measurement of that loss is recognized.”

2.64 It is possible that an entity will have to issue financial statements before completing step 2 of the goodwill impairment test. In this case, paragraphs 18–19 of FASB ASC 350-20-35 provide that if

35-18 ...a goodwill impairment loss is probable and can be reasonably estimated, the best estimate of that loss shall be recognized in those financial statements (see Subtopic 450-10).

35-19 Paragraph 350-20-50-2(c) requires disclosure of the fact that the measurement of the impairment loss is an estimate. Any adjustment to that estimated loss based on the completion of the measurement of the impairment loss shall be recognized in the subsequent reporting period.

Attributing Goodwill Impairments to the Parent and the Noncontrolling Interest

2.65 If a reporting unit is less than wholly owned, FASB ASC 350-20-35-57A states that

[a]ny impairment loss measured in the second step of the goodwill impairment test shall be attributed to the parent and the noncontrolling interest on a rational basis. If the reporting unit includes only goodwill attributable to the parent, the goodwill impairment loss would be attributed entirely to the parent. However, if the reporting unit includes goodwill attributable to both the parent and the noncontrolling interest, the goodwill impairment loss shall be attributed to both the parent and the noncontrolling interest.

Disclosure Requirements

Disclosure Requirements of Accounting Principles Generally Accepted in the United States of America

2.66 FASB ASC 235-10-50 provides guidance on accounting policies disclosures. Specific disclosure requirements for goodwill and goodwill impairment losses are provided in FASB ASC 350-20-50 and are included in the notes to consolidated financial statements. In appendix A, “Disclosure of Goodwill and Goodwill Impairment Testing,” this guide provides those disclosures in the example notes titled “Significant Accounting Policies” and “Goodwill.”

SEC Disclosure Requirements

2.67 SEC Release No. 33-8350, “Commission Guidance Regarding Management’s Discussion and Analysis of Financial Condition and Results of Operations,” requires certain disclosures about critical accounting estimates and are provided in section 7, “MD&A,” of Form 10-K. Section 9510, *Goodwill Impairment*, of the SEC Financial Reporting Manual states that

[e]stimates related to goodwill impairment testing are commonly considered critical by registrants. As a result, the staff has developed guidance regarding these disclosures with the objective of ensuring that investors are provided with information that allows for an assessment of the probability of a future material impairment charge.

In order to comply with the requirements of S-K section 303(a)(3)(ii) (which requires a description of a known uncertainty), registrants should consider providing the disclosures outlined in Section 9510.3 for each reporting unit that is at risk of failing step 1 of the goodwill impairment test. Although not required, the task force believes that entities should consider providing disclosure about the qualitative factors that were considered for determining that the first step of the goodwill impairment test was unnecessary. See appendix A of this guide for examples of GAAP and SEC disclosures for goodwill and goodwill impairment testing.

Chapter 3

Qualitative Assessment

Introduction

3.01 The primary purpose of this chapter is to discuss and illustrate the optional qualitative assessment. This chapter addresses, among other issues, the process of identifying both the inputs and assumptions that most affect fair value and the events and circumstances that may have an impact on those inputs and assumptions. It also includes an example that illustrates one approach for performing the qualitative assessment. The example is intended to illustrate the thought process described in this chapter as opposed to laying out documentation requirements. Other approaches may be acceptable.

3.02 The objective of the qualitative assessment is to identify and evaluate relevant events and circumstances to conclude whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.¹ The task force believes that in order to make this conclusion, an entity would need to have an approach in place to identify and evaluate relevant events and circumstances. Although there may be other approaches to perform the qualitative assessment, the task force believes that the following approach would meet this objective:

- Identify inputs and assumptions that most affect fair value.
- Identify relevant events and circumstances that may have an impact on those inputs and assumptions.
- Weigh the events and circumstances.
- Conclude on the totality of events and circumstances.

Identifying Inputs and Assumptions That Most Affect Fair Value

3.03 An entity would identify the method(s) appropriate to measure the fair value of each of its reporting units and then identify the key inputs and assumptions that would most affect each method. Entities may want to consider the methods and inputs and assumptions used in their last quantitative test to determine whether they are still relevant and whether they have changed. Changes in inputs and assumptions that most affect fair value may result, for example, from industry or market changes or entity-specific events, such as changes in the composition of the reporting unit (for example, reorganization or acquisition incorporated into the reporting unit).

3.04 Understanding the inputs and assumptions that most affect the fair value of a reporting unit will enable entities to focus their efforts on evaluating the key inputs and assumptions that can most affect the outcome of the qualitative assessment so that those factors are given more weight. For example, inputs and assumptions that most affect fair value of a reporting unit that is valued using an income approach (for example, a discounted cash flow method) could be cash flow projections, terminal growth rate, and discount rate.

¹ In this chapter, it is assumed that the carrying amount of a reporting unit is positive.

For the market approach, multiples stated as a factor of revenue; earnings before interest, taxes, depreciation, and amortization (EBITDA); earnings before interest and taxes (*EBIT*); or other relevant metrics are possible key inputs and assumptions when determining fair value.

3.05 Depending on the nature of the reporting unit or availability of observable market prices, a calculation² of fair value might utilize multiple valuation approaches or techniques. If that is the case, the task force believes the entity would need to consider the inputs and assumptions to, and relative weightings of, each valuation technique to identify those inputs and assumptions that most affect fair value.

3.06 Fair value is based on a market participant concept, regardless of the valuation technique used to calculate fair value of a reporting unit. See the “Market Participant Assumptions” section of chapter 4, “Measuring Fair Value of a Reporting Unit,” of this guide for further discussion.

Identifying Relevant Events and Circumstances

3.07 Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 350-20-35-3C states that

[i]n evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, an entity shall assess relevant events and circumstances. Examples of such events and circumstances include the following:

- a. Macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets
- b. Industry and market considerations such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (consider in both absolute terms and relative to

² Consistent with guidance in Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 350-20, this guide refers to calculation of fair value; however, the meaning attributed to the term *calculation* in FASB ASC 350-20 and this guide is different from how this term is defined in Statement on Standards for Valuation Services (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100).

SSVS No. 1 discusses two types of engagements to estimate value: a valuation engagement and calculation engagement. SSVS No. 1 defines *valuation engagement* as “[a]n engagement to estimate value in which a valuation analyst determines an estimate of the value of a subject interest by performing appropriate valuation procedures ... and is free to apply the valuation approaches and methods he or she deems appropriate in the circumstances. The valuation analyst expresses the results of the valuation engagement as a conclusion of value, which may be either a single amount or a range.” SSVS No. 1 defines *calculation engagement* as

[a]n engagement to estimate value wherein the valuation analyst and the client agree on the specific valuation approaches and valuation methods that the valuation analyst will use and the extent of valuation procedures the valuation analyst will perform to estimate the value of a subject interest. A calculation engagement generally does not include all of the valuation procedures required for a valuation engagement. If a valuation engagement had been performed, the results might have been different. The valuation analyst expresses the results of the calculation engagement as a calculated value, which may be either a single amount or a range.

The meaning attributed to the term *calculation* in this guide is more closely aligned with how SSVS No. 1 defines valuation engagement as opposed to calculation engagement.

peers), a change in the market for an entity's products or services, or a regulatory or political development

- c. Cost factors such as increases in raw materials, labor, or other costs that have a negative effect on earnings and cash flows
- d. Overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods
- e. Other relevant entity-specific events such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation
- f. Events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit
- g. If applicable, a sustained decrease in share price (consider in both absolute terms and relative to peers).

3.08 As stated in FASB ASC 350-20-35-3F

[t]he examples included in paragraph 350-20-35-3C(a) through (g) are not all-inclusive, and an entity shall consider other relevant events and circumstances that affect the fair value or carrying amount of a reporting unit in determining whether to perform the first step of the goodwill impairment test An entity also should consider positive and mitigating events and circumstances that may affect its determination of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

3.09 The task force believes the following are more specific examples of events and circumstances that may require consideration:

- Market reaction to a new product or service
- Technological obsolescence
- A significant legal development
- Contemplation of a bankruptcy proceeding
- An expectation of a change in the risk factors or risk environment influencing the assumptions used to calculate the fair value of a reporting unit, such as discount rates or market multiples

3.10 *Recent fair value calculation.* FASB ASC 350-20-35-3F provides that “[i]f an entity has a recent fair value calculation for a reporting unit, it also should include as a factor in its consideration the difference between the fair value and the carrying amount in reaching its conclusion about whether to perform the first step of the goodwill impairment test.” The task force believes that the qualitative assessment, if performed, generally may be more cost-effective when a reporting unit’s fair value substantially exceeds its carrying amount in a recent prior period and no significant adverse changes have since occurred. In contrast, the qualitative assessment may not be cost-effective for a reporting unit whose fair value approximated its carrying amount in a recent

fair value calculation because in those situations, it may be difficult to conclude, based solely on a qualitative assessment, that it is not more likely than not that the fair value of the reporting unit is less than the carrying amount, and as a result, the entity likely would still need to perform step 1 of the goodwill impairment test.

3.11 Paragraph BC32 of Accounting Standards Update (ASU) No. 2011-08, *Intangibles—Goodwill and Other (Topic 350): Testing Goodwill for Impairment*,³ states that “the more time that elapses since an entity last calculated the fair value of a reporting unit, the more difficult it may be to make a conclusion based solely on a qualitative assessment of relevant events and circumstances.” As such, some entities may choose to periodically calculate a reporting unit’s fair value. The frequency with which an entity calculates fair value for a reporting unit could depend on facts and circumstances such as the amount by which the last fair value calculation exceeded the carrying amount and the significance of relevant events or circumstances identified subsequent to the last fair value calculation.

3.12 If more than one year has elapsed since the most recent fair value calculation was performed, the task force believes the qualitative assessment would need to consider the relevant events and circumstances identified since the last fair value calculation.

3.13 Changes in the composition of a reporting unit and its carrying amount could result from dispositions, acquisitions, and reorganizations. Changes, if any, require consideration about the impact on fair value of the reporting unit and its carrying amount.

Weighing Identified Events and Circumstances

3.14 As indicated in FASB ASC 350-20-35-3F

[a]n entity shall consider the extent to which each of the adverse events and circumstances identified could affect the comparison of a reporting unit’s fair value with its carrying amount. An entity should place more weight on the events and circumstances that most affect a reporting unit’s fair value or the carrying amount of its net assets.

Some relevant events and circumstances will affect most, if not all, reporting units. In many cases, though, the relative importance of the various factors may be different for each reporting unit.

3.15 FASB ASC 350-20-35-3G states that

[a]n entity shall evaluate, on the basis of the weight of evidence, the significance of all identified events and circumstances in the context of determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. None of the individual examples of events and circumstances included in paragraph 350-20-35-3C(a) through (g) are intended to represent stand-alone events or circumstances that necessarily require an entity to perform the first step of the goodwill impairment test. Also, the existence of positive and mitigating events and circumstances is not

³ This and other paragraphs from the “Background Information and Basis for Conclusions” section of FASB Accounting Standards Update No. 2011-08, *Intangibles—Goodwill and Other (Topic 350): Testing Goodwill for Impairment*, were not codified in FASB ASC; however, the task force believes these paragraphs provide helpful guidance and, therefore, decided to incorporate them in this guide.

intended to represent a rebuttable presumption that an entity should not perform the first step of the goodwill impairment test.

3.16 All available evidence, both positive and negative, should be considered to determine whether, based on the weight of that evidence, it is more likely than not that the fair value of a reporting unit is less than its carrying amount. An entity needs to use judgment in considering the relative impact of positive and negative evidence. The task force believes that, all else equal, the weight given to the potential effect of positive and negative evidence needs to be commensurate with the extent to which it can be objectively verified. Therefore, the task force believes that the more negative evidence exists, the more positive evidence would be necessary and the more difficult it would be to support a conclusion that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount.⁴

3.17 In some situations, more weight may be given to certain events or circumstances that may have a broad effect across reporting units. For example, as indicated in paragraph BC32 of ASU No. 2011-08, “in an unfavorable economic environment, many entities likely may determine that they must calculate fair value under the first step of the test because it may be more likely than not that the fair value of a reporting unit is less than its carrying amount.” Given the magnitude of some economic downturns, it may be difficult to identify, for some reporting units, relevant positive or mitigating events or circumstances that overcome the impact of the economic downturn.

Concluding on the Totality of Events and Circumstances

3.18 If, after assessing the totality of relevant events or circumstances, discussed in paragraphs 3.07–.09, an entity determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the first and second steps of the goodwill impairment test are unnecessary. If an entity determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity is required to perform the first step of the two-step goodwill impairment test.

3.19 *Extent of analysis and level of documentation.* The complexity and extensiveness of the qualitative assessment will vary depending on facts and circumstances. As indicated in paragraph BC22 of ASU No. 2011-08, “assessing events and circumstances that may affect the comparison of a reporting unit’s fair value with its carrying amount may require significant judgment, particularly when evaluating the potential effect of multiple relevant factors.” For example, the task force believes that the qualitative assessment may need to be more extensive as more time elapses since the date of a reporting unit’s last fair value calculation.

3.20 If, after performing the qualitative assessment, an entity concludes that further goodwill impairment testing is not necessary, consistent with language in paragraph BC24 of ASU No. 2011-08, the entity would need to make a positive assertion about its conclusion reached and the events and circumstances taken into consideration. The task force believes that this positive assertion would need to be supported by appropriate and relevant

⁴ The concept in this paragraph is based on guidance in FASB ASC 740-10-30 on establishing a valuation allowance for deferred tax assets and FASB ASC 310-10-35-26 in connection with measurement of impairment for loans. The task force believes it is helpful to consider this guidance when performing the goodwill qualitative assessment.

documentation. The task force further believes that the extent of documentation should be commensurate with the level of judgment and qualitative analysis involved in supporting the positive assertion.

3.21 The task force believes that documentation of the qualitative assessment for a reporting unit would only be required when an entity is relying on the qualitative assessment.

Other Considerations

3.22 *Optionality of the qualitative assessment.* FASB ASC 350-20-35-3 provides that “[a]n entity may first assess qualitative factors, as described in paragraphs 350-20-35-3A through 35-3G, to determine whether it is necessary to perform the two-step goodwill impairment test discussed in paragraphs 350-20-35-4 through 35-19.” As indicated in FASB ASC 350-20-35-3B, “[a]n entity has an unconditional option to bypass the qualitative assessment...for any reporting unit in any period and proceed directly to performing the first step of the goodwill impairment test. An entity may resume performing the qualitative assessment in any subsequent period.” An entity’s selection of reporting units on which to perform the qualitative assessment is not an accounting policy decision that needs to be followed consistently for each reporting unit or in every period.

3.23 *Interim evaluation and qualitative assessment.* As indicated in paragraphs 28 and 30 of FASB ASC 350-20-35

35-28 Goodwill of a reporting unit shall be tested for impairment on an annual basis and between annual tests in certain circumstances.

35-30 Goodwill of a reporting unit shall be tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

The interim evaluation is focused on whether there have been adverse changes in events or circumstances since the last testing date that would indicate it is more likely than not that a reporting unit’s fair value is less than its carrying amount. The examples of events and circumstances (see paragraphs 3.07–.09) considered in the interim evaluation are the same as those used in the qualitative assessment.

3.24 *Comparison to market capitalization.* Public entities generally compare the sum of the fair values of their reporting units to the entity’s *market capitalization*. Paragraph BC34 of ASU No. 2011-08 indicates that FASB acknowledges that the use of the qualitative assessment may result in entities applying more judgment about when and how to perform the comparison to market capitalization. However, the task force believes the comparison to market capitalization generally remains a prudent check of the aggregated fair values of an entity’s reporting units.

3.25 An entity may perform a qualitative assessment for some reporting units while proceeding to the first step of the two-step goodwill impairment test for other reporting units. This may have ramifications for an entity performing an overall comparison to market capitalization. When performing an overall comparison to market capitalization, entities could

- include the current year fair values for reporting units for which quantitative measurements (under the first step of the two-step goodwill impairment test) were performed, and

- estimate the fair value for the reporting units for which qualitative assessments were performed; the estimation could be based on the results of past quantitative measurements (adjusted for subsequent events and circumstances) or current carrying amounts (adjusted for an estimate of fair value over carrying amount).

3.26 Sensitivity analyses. Because the concept of fair value is inherently quantitative (that is, its end result is a value), in certain cases making a qualitative assertion about the fair value of a reporting unit may require supporting or corroborating quantitative analysis. As a result, entities may find it beneficial to perform a sensitivity analysis on the inputs and assumptions that most affect the fair value of each reporting unit. Based on the results of the sensitivity analysis, the entity may want to consider whether it should continue performing the qualitative assessment or proceed to the first step of the goodwill impairment test for that reporting unit.

Example 3-1 — An Approach to Performing the Qualitative Assessment

The following example illustrates one approach to determine whether the first step of the two-step goodwill impairment test should be performed. The example analyzes an entity, HealthCo, that has three reporting units (RU1, RU2, and RU3). Each reporting unit has a positive carrying amount and is considered separately based on specific facts and circumstances.

The example identifies both positive and negative relevant events and circumstances that have occurred since the last goodwill impairment test and evaluates whether those changes have an impact on the inputs and assumptions that most affect fair value for each reporting unit. In this example, HealthCo's assumptions regarding the fair value of its reporting units have been determined to be consistent with market participant assumptions.

The inputs and assumptions used in these example scenarios are illustrative only and are not intended to serve as guidelines. Facts and circumstances for each individual scenario should be considered when performing an analysis and determining the extent of documentation needed (see paragraphs 3.19–.21 for further discussion). The following example demonstrates one way to perform and document the qualitative assessment. The task force believes that the extent of documentation should be commensurate with the level of judgment and qualitative analysis involved in supporting the positive assertion.

Background

HealthCo operates in the consumer health food and beverage industry and has three reporting units that make, market, and distribute specific healthy products: RU1 specializes in energy drinks, RU2 in energy foods, and RU3 in flavored water drinks. HealthCo currently sells its products to local, regional, and national retailers in the United States.

HealthCo performs goodwill impairment testing for all of its reporting units as of October 1, the first day of its fiscal fourth quarter. The last quantitative test was performed as of October 1, 2X11, and all three reporting units passed the step 1 test. The valuation methods used to perform the prior quantitative test for all three reporting units included a discounted cash flow (DCF) method and the use of market multiples from guideline public companies. HealthCo believes that these methods are still relevant for determining fair value of its reporting units. To determine inputs and assumptions that most affect fair value of its

reporting units, HealthCo considered inputs and assumptions used in its last quantitative test, as well as industry and market changes, and entity-specific events. As a result, HealthCo identified the following key inputs and assumptions: revenue, growth rate, gross margin, EBITDA margin, discount rate, market multiples, and market capitalization.

The current year's test is performed as of October 1, 2X12.

The following table provides additional background information about the three reporting units of HealthCo.

	<i>Excess of Fair Value Over Carrying Amount as of 10/1/2X11 (as a Percentage of Carrying Amount)</i>	<i>Total Assets as of 10/1/2X12</i>	<i>Year-to-Date Revenue Through 9/30/2X12</i>	<i>Goodwill Balance as of 10/1/2X12</i>	<i>Excess of HealthCo's Market Capitalization Over Carrying Amount as of 10/1/2X12</i>
(In Thousands)					
RU1—Energy Drinks	21%	\$96,000	\$360,000	\$25,000	N/A
RU2—Energy Foods	8%	40,000	36,000	8,000	N/A
RU3—Flavored Water Drinks	19%	60,000	105,000	15,000	N/A
Corporate		16,000		—	
HealthCo Total		\$212,000	\$501,000	\$48,000	30%

HealthCo determined that the following relevant events and circumstances have occurred since the last impairment test was performed that could affect the fair values of all three reporting units:

- General macroeconomic trends have been disappointing because growth of the U.S. economy has continued to trend significantly lower as compared with expectations. This is evidenced by a gross domestic product (GDP) growth rate of 2 percent for the current year as opposed to an expected⁵ growth rate of 3 percent.

⁵ Throughout this example, actual performance results since the last quantitative impairment test are compared with expected performance for this period. In this context, references to expectations and forecasts refer to projections for the current period that were included in the prospective financial information used to arrive at the reporting units' fair values during the last quantitative impairment test.

- Over the past year, HealthCo's stock price increased slightly; however, the average stock price for the guideline companies remained flat.
- HealthCo's market capitalization has increased slightly over the past year and exceeded its carrying amount by approximately 30 percent at October 1, 2X12.
- The interest rate environment remained steady and is not expected to have a significant impact on the cost of borrowing.

Evaluation of RU1

In addition to the relevant events and circumstances applicable to all three reporting units (see the "Background" section of this example), HealthCo identified the following specific relevant events and circumstances that have occurred since the last impairment test was performed that could affect the fair value or carrying amount of RU1:

- The market in which RU1 operates has experienced greater than expected growth because the demand for energy drinks has increased among various consumer groups.
- The market in which RU1 operates has grown increasingly competitive due to the fact that several new competitors have entered the energy drink market.
- RU1's revenue grew by approximately 8 percent, compared with expected growth of 5 percent, due to the introduction of 2 new products that tested more favorably than expected in initial marketing surveys and the obtainment of celebrity endorsement for 1 of these new products.
- As a result of the developments described in the preceding point, RU1's market share increased by 2 percent over expectations.
- RU1 relies on various foreign distributors for certain raw materials and supplies. Unexpected unfavorable changes in foreign exchange rates negatively impacted margins by less than 1 percent.
- As anticipated, operating expenses, even after considering the costs of the celebrity endorsement, remained relatively flat and are not expected to change significantly in the future.
- RU1's gross margins exceeded expectations by 4 percent.
- RU1's EBITDA grew at 8 percent, exceeding management's expectations by 4 percent. There were no significant capital investments for RU1.
- Average EBITDA of the guideline companies was in line with analyst expectations of 4 percent growth.
- Implied average market multiples of the relevant guideline companies remained flat over the last year.
- There have been no significant changes in the carrying amount or composition of RU1.

HealthCo summarized its assessment of the relevant events and circumstances that occurred since the last impairment test that could have an impact on the fair value or carrying amount of RU1 by using the following table.⁶

⁶ Entities would need to determine an appropriate format for documenting the qualitative assessment; the table in this example is simply one format of documentation.

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Macroeconomic Conditions					
Gross domestic product (GDP) growth rate of 2%, compared with expected GDP growth of 3%.	Discount rate, growth rate	Medium	Negative	O	Slower than expected GDP growth rate is a negative factor that could impact cash flows.
Industry Considerations					
Greater than anticipated growth in market demand for energy drinks.	Growth rate	Medium	Positive	O	Growth in market demand may have a positive impact on fair value if it helps RU1 gain market share and exceed growth and profitability targets.
Market in which RU1 operates has	Growth rate, EBITDA margin	Medium	Negative	S	Increased competition may have a negative

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
<p>experienced increased competition; new competitors have entered the market.</p>					<p>impact on fair value if it impacts RU1's ability to meet growth and profitability objectives.</p>
Entity-Specific Events and Circumstances					
<p>Revenue grew by 8%, compared with expected growth of 5%, due to the introduction of new products that tested more positively than expected and obtaining of celebrity endorsement for one of these new products.</p>	<p>Growth rate</p>	<p>High</p>	<p>Positive</p>	<p>O</p>	<p>N/A</p>

(continued)

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Market share increased by 2% over expectations.	Growth rate	High	Positive	O	N/A
Unexpected unfavorable changes in foreign exchange rates negatively impacted margins by less than 1%.	EBITDA margin	Low	Negative	O	Unexpected unfavorable changes in foreign exchange rates put a slight downward pressure on margins.
Operating expenses remained relatively flat, which is consistent with expectations; furthermore, they are not expected to change significantly in the near term.	EBITDA margin	Medium	Positive	O	Although revenues and margins grew, operating expenses remained flat, resulting in improving EBITDA margins.

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Gross margin exceeded prior year forecast by 4%.	Gross margin	High	Positive	O	RU1 exceeded revenue expectations by 3% and kept costs steady, thus achieving higher than expected gross margins.
RU1's EBITDA grew at 8%, exceeding management's expectations by 4%.	Market multiples	High	Positive	O	RU1's growth exceeded management expectations, as well as analysts' expectations for the guideline companies.
Implied average multiples for relevant guideline companies remained flat.	Market multiples	High	Neutral	O	N/A

(continued)

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
No significant changes in the carrying amount or composition of RU1.		Low	Neutral	O	The carrying amount of RU1 has not changed significantly, which should be considered in conjunction with the prior year cushion of 21% (see the “Other Considerations” section of this table).
Other Considerations					
Prior year cushion of 21%.		High	Positive	O	
Current interest rate environment remained steady.	Discount rate	Medium	Neutral	O	Steady interest rate environment is not expected to have a significant impact on the discount rate.

HealthCo's Analysis and Conclusion

For the current year, it was decided to proceed with the qualitative assessment for RU1. Performing the qualitative assessment involved identifying the inputs and assumptions that most affect fair value, evaluating the significance of all identified relevant events and circumstances, and weighing the factors to determine whether it is more likely than not that the fair value of RU1 is less than its carrying amount.

RU1 had a 21 percent *cushion* as of October 1, 2X11, and there have been no significant changes in its carrying amount since that time. The events and circumstances identified as having a positive impact on the inputs and assumptions that most affect fair value were also determined to have a greater impact on fair value than those identified as being negative events and circumstances. Specifically, better than expected market demand for 2 new products, as well as obtaining celebrity endorsement for 1 of these products, had a positive impact on operating results. Revenue growth exceeded expectations, and costs remained steady, resulting in higher than anticipated gross and EBITDA margins. The steady interest rate environment is a macroeconomic factor that is not expected to have a significant impact on the cost of borrowing. HealthCo's market capitalization increased slightly over the past year and exceeded its carrying amount by approximately 30 percent at October 1, 2X12, despite the fact that RU2 and RU3 performed below expectations since the last impairment test (see parts B and C of this example); this may indicate that the fair value of RU1 increased. Finally, the implied multiples for RU1's guideline companies remained flat over the last year, which may suggest that market pricing since the last quantitative test has remained unchanged.

Although some identified relevant events and circumstances were classified as having a negative impact on fair value, the impact was not considered to be high and was mitigated by other positive events and circumstances, including the 21 percent cushion. For example, increased competition in the market in which RU1 operates was mitigated by greater than anticipated growth in market demand for energy drinks. Although the overall economy grew at a slower than expected pace, this development had no clear impact on the fair value of RU1 for the current period; however, if GDP growth continues to decrease, RU1's operations may be negatively impacted. Although unexpected unfavorable changes in foreign exchange rates negatively impacted margins, the impact was not significant.

After evaluating and weighing all these relevant events and circumstances, it was concluded that a positive assertion can be made⁷ from the qualitative assessment that it is not more likely than not that the fair value of RU1 is less than its carrying amount. As such, it is not necessary to perform the first step of the two-step goodwill impairment test for RU1.

Evaluation of RU2

In addition to the relevant events and circumstances applicable to all three reporting units (see the "Background" section of this example), HealthCo identified the following specific relevant events and circumstances that have occurred since the last impairment test was performed and that could affect the fair value or carrying amount of RU2:

- Several new competitors have entered the market and established entities have expanded product lines to include energy foods.

⁷ As discussed in paragraph 3.20, the task force believes that this positive assertion would need to be supported by appropriate and relevant documentation.

- Market share of RU2 declined by 3 percent, even though it was expected to remain flat.
- Revenues decreased by 4 percent, compared with expected growth of 2 percent.

HealthCo's Analysis and Conclusion

After considering the amount by which RU2 passed the first step of the two-step goodwill impairment test in 2X11 (which was with a cushion of 8 percent), as well as increased competition in this industry and a drop in market share and revenues, it was decided to bypass the qualitative assessment and proceed directly to performing step 1 of the goodwill impairment test for RU2.

Evaluation of RU3

In addition to the relevant events and circumstances applicable to all three reporting units (see the "Background" section of this example), HealthCo identified the following specific relevant events and circumstances that have occurred since the last impairment test was performed and that could affect the fair value or carrying amount of RU3:

- The market in which RU3 operates is showing signs of maturity, including experiencing slower than expected growth; this suggests that demand for flavored water drinks may be leveling off sooner than anticipated.
- The market in which RU3 operates has experienced increased competition from current competitors through offerings of new flavors, sizes, and bottle styles.
- RU3's revenue grew by approximately 2 percent, compared with expected growth of 4 percent.
- RU3's market share remained flat, which is consistent with expectations.
- Gross margins were flat, which is consistent with expectations.
- Consistent with expectations, RU3's EBITDA remained flat.
- Implied average multiples from relevant guideline companies decreased slightly over the last year.
- Consistent with its strategic plan that was used in the last impairment test, RU3 has integrated with RU1's distribution systems in key markets and has also made improvements to inventory controls, resulting in a decrease in its products' days in inventory. HealthCo expects small but positive future impact on RU3's margins.
- A lawsuit related to RU3 was filed for alleged patent infringement. The suit is claiming damages for prior infringement and demanding future royalty payments of 1 percent of sales to prevent future infringement. HealthCo intends to vigorously defend the suit and believes an unfavorable outcome is not probable. No liability related to the litigation has been recorded and defense costs are deemed not significant.
- There was an increase of 5 percent in RU3's carrying amount due to capitalized costs incurred to integrate the distribution systems of RU1 and RU3; the costs were funded by corporate.

HealthCo summarized its assessment of the relevant events and circumstances that occurred since the last impairment test that could have an impact on the fair value or carrying amount of RU3 by using the following table.

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Macroeconomic Conditions					
GDP growth rate of 2%, compared with expected GDP growth of 3%.	Discount rate, growth rate	Medium	Negative	O	Slower than expected GDP growth rate is a negative factor that could impact cash flows.
Industry Considerations					
Slower than expected growth in demand for flavored water drinks.	Growth rate	High	Negative	S	Lower than expected demand may suggest that demand is leveling off sooner than anticipated.
Market in which RU3 operates has experienced increased competition from	Growth rate, EBITDA margin	High	Negative	S	Increased competition may have an unforeseen negative impact on RU3's growth and profitability.

(continued)

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
current competitors through offerings of new flavors, sizes, and bottle styles.					
Entity-Specific Events and Circumstances					
Revenue grew by 2%, compared with expected growth of 4%.	Growth rate	High	Negative	O	RU3 fell short of its revenue growth target, in part due to current economic conditions and slower than expected growth in market demand for the product.
Market share remained flat, which is consistent with expectations.	Growth rate	High	Neutral	O	RU3's market share remained flat despite increased competition, but it is uncertain whether it can be sustained.

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Gross margins were flat, which is consistent with expectations.	Gross margins	High	Neutral	O	Margins remained flat despite the fact that revenue grew at less than expected rate.
RU3's EBITDA remained flat, consistent with expectations.	Market multiples	High	Neutral	O	N/A
Implied average multiples from relevant guideline companies decreased slightly over the last year.	Market multiples	High	Negative	O	N/A
Integration with RUI's distribution systems.	EBITDA margin	Low	Positive	O	The beneficial future impact on margins from these cost savings

(continued)

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Increase in carrying amount of 5%.		Low	Negative	O	<p>may mitigate some of the shortfall in revenue.</p> <p>The change in carrying amount is primarily due to the distribution systems' integration. The fair value of the capital investment, including the cost savings it will generate, is expected to exceed its carrying amount. However, this is considered a negative factor due to the risk that RU3 will not recover its investment.</p>

<i>Relevant Events and Circumstances</i>	<i>Inputs and Assumptions That Most Affect Fair Value—Revenue, Growth Rate, Gross Margin, EBITDA Margin, Discount Rate, Market Multiples, or Market Capitalization</i>	<i>Weight of Events and Circumstances—High, Low, or Medium</i>	<i>Nature of Impact—Positive, Negative, or Neutral</i>	<i>Nature of Evidence—Subjective (S) or Objective (O)</i>	<i>Other Comments</i>
Improvements to inventory controls.		Low	Positive	S	RU3's improved inventory controls is a positive factor, resulting in a decrease in its products' days in inventory.
Pending lawsuit.	EBITDA margin, discount rate	Low	Negative	S	Although management believes an unfavorable outcome is not probable, RU3 is still exposed to future uncertainties.
Other Considerations					
Prior year cushion of 19%.		High	Positive	O	N/A

HealthCo's Analysis and Conclusion

For the current year, it was decided to proceed with the qualitative assessment for RU3. Performing the qualitative assessment involved identifying the inputs and assumptions that most affect fair value, evaluating the significance of all identified relevant events and circumstances, and weighing the factors to determine whether it is more likely than not that the fair value of RU3 is less than its carrying amount.

Several of the entity-specific events and circumstances identified as having a negative impact on the inputs and assumptions that most affect fair value were also determined to have a greater impact on fair value than those identified as being positive events and circumstances. The overall economy grew at a slower pace than expected, as did the demand for flavored water drinks. This lower than expected demand for flavored water drinks may suggest that demand is leveling off sooner than anticipated. In addition, current competitors offering new flavors of water, sizes, and bottle styles may have a negative impact on RU3's operating results going forward. In 2X11, RU3's market share remained flat despite the increased competition, but it is unclear whether its market share can be sustained. RU3's performance during the current year was disappointing, with revenue growth being below forecast. Although the shortfall in revenue may be mitigated by future cost savings resulting from the integration with RU1's distribution systems and its improved inventory controls, the positive impact is not expected to be sufficient to fully compensate for it. Gross and EBITDA margins remained flat, as expected. The implied multiples for RU3's guideline companies decreased slightly over the last year, which may suggest that market pricing has declined. Also, the uncertainty concerning its pending lawsuit may have a negative impact on RU3's fair value. Although RU3 had a 19 percent cushion from the prior year, this cushion may be reduced if RU3 does not recover the capital costs incurred to integrate with RU1's distribution systems.

After evaluating and weighing all these relevant events and circumstances and due to the number of negative events identified, it is difficult to determine the effect on fair value. Therefore, it was concluded that a positive assertion cannot be made⁸ that it is not more likely than not that the fair value of RU3 is less than its carrying amount. As such, it is necessary to proceed to performing step 1 of the goodwill impairment test for RU3.

⁸ As stated in paragraph 3.21, the task force believes documentation of the qualitative assessment for a reporting unit would only be required when an entity is relying on the qualitative assessment.

Chapter 4

Measuring Fair Value of a Reporting Unit

Introduction

4.01 Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 820, *Fair Value Measurement*, establishes a framework for measuring fair value and requires certain disclosures about fair value measurements. FASB ASC 820 is a broad, principles-based standard that applies to all entities, transactions, and instruments that require or permit fair value measurements.

4.02 FASB ASC 350-20-35-22 states that

[t]he fair value of a reporting unit refers to the price that would be received to sell the unit as a whole in an orderly transaction between market participants at the measurement date. Quoted market prices in active markets are the best evidence of fair value and shall be used as the basis for the measurement, if available.

4.03 Typically, a quoted market price for a reporting unit is not available. If, however, a reporting unit is an entity, or is within an entity, with publicly traded equity securities, a market capitalization for the reporting unit would exist. FASB ASC 350-20-35-22 cautions that “the market price of an individual equity security (and thus the market capitalization of a reporting unit with publicly traded equity securities) may not be representative of the fair value of the reporting unit as a whole.”

4.04 FASB ASC 350-20-35-23 further explains that

[s]ubstantial value may arise from the ability to take advantage of synergies and other benefits that flow from control over another entity. Consequently, measuring the fair value of a collection of assets and liabilities that operate together in a controlled entity is different from measuring the fair value of that entity’s individual equity securities. An acquiring entity often is willing to pay more for equity securities that give it a controlling interest than an investor would pay for a number of equity securities representing less than a controlling interest. That control premium may cause the fair value of a reporting unit to exceed its market capitalization. The quoted market price of an individual equity security, therefore, need not be the sole measurement basis of the fair value of a reporting unit.

4.05 FASB ASC 350-20-35-24 states that

[i]n estimating the fair value of a reporting unit, a valuation technique based on multiples of earnings or revenue or a similar performance measure may be used if that technique is consistent with the objective of measuring fair value. Use of multiples of earnings or revenue in determining the fair value of a reporting unit may be appropriate, for example, when the fair value of an entity that has comparable operations and economic characteristics is observable and the relevant multiples of the comparable entity are known. Conversely, use of multiples would not be appropriate in situations in which the operations or activities of an entity for which the

multiples are known are not of a comparable nature, scope, or size as the reporting unit for which fair value is being estimated.

4.06 The Impairment Task Force (task force) believes that the use of a valuation technique based on multiples is appropriate provided that guideline public companies or guideline company transactions with comparable operations and economic characteristics can be identified. If identified guideline companies or transactions exhibit certain differences when compared to the reporting unit, but are otherwise deemed to be reasonably similar, the observable multiples for the guideline companies and transactions can be adjusted to account for these differences. Such adjustments relate to factors including profitability, anticipated growth, size, *working capital*, nonrecurring or nonoperating income or expenses, or differences in accounting policies. The purpose of making adjustments to observable multiples is to make the guideline company or transaction more comparable to the reporting unit.

Market Participant Assumptions

4.07 FASB ASC 820-10-35-9 states that “[a] reporting entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use in pricing the asset or liability, assuming that market participants act in their economic best interest.” When measuring the fair value of a reporting unit for goodwill impairment testing, the task force notes that questions about fair value assumptions concerning highest and best use can arise when the current use of a specific reporting unit may be different from how a market participant may intend to hold the same net assets. In those situations, interrelationships or synergies among two or more reporting units would need to be considered for purposes of determining a fair value of each reporting unit.

4.08 The task force believes that when a discounted cash flow (DCF) method is used to measure the fair value of the reporting unit, cash flows and elements of the discount rate (for example, size premium)¹ should be evaluated to ensure they reflect market participant assumptions for the reporting unit. Similar consideration for adjustments might be necessary when using a market approach to ensure appropriate comparable entities are utilized (see paragraph 4.58).

Example 4-1—Incorporating Market Participant Assumptions in Prospective Financial Information

Entity A owns and operates 50 retail stores organized for internal reporting purposes into 2 operating segments (East and West). The East operating segment has been determined to have 2 reporting units and the West operating segment has been determined to have 1 reporting unit. Entity A benefits from certain economies of scale, utilizing the purchasing power of all 50 stores when negotiating purchases of both inventory and supplies. Entity A believes market participants would also be able to realize such economies of scale as they would

¹ The size premium refers to the additional risk and, therefore, the higher cost of capital associated with a smaller size entity. Morningstar provides the following definitions for mid-cap, low-cap, and micro-cap stocks: “Mid-Cap stocks are defined as the aggregate of size-deciles 3-5 of the NYSE/AMEX/NASDAQ; Low-Cap stocks are defined as the aggregate of size-deciles 6-8 of the NYSE/AMEX/NASDAQ; Micro-Cap stocks are defined as the aggregate of size-deciles 9-10 of the NYSE/AMEX/NASDAQ.”

either acquire all of the reporting units together or would possess similar existing assets to enable such lower costs to be realized if acquired individually.

Entity A measures the fair value of each reporting unit individually. When measuring cash outflows for each reporting unit under the discounted cash flow method, Entity A will assume for each reporting unit the benefits arising from the combined purchasing power of all reporting units (bottom-up approach).

The task force believes if market participants would be expected to realize economies of scale, by possessing similar assets or by purchasing the reporting units together, such economies of scale represent appropriate considerations to fair value of each reporting unit. The task force further believes that such considerations should be incorporated through the use of this approach because this conforms to the requirement to test goodwill for each reporting unit independently.

When measuring the fair value of reporting units it would not be appropriate to measure the fair value of the multiple reporting units together and then allocate the fair value of the combined reporting units to the individual reporting units (top-down approach). The task force believes that the application of this approach would be viewed as combining reporting units for testing which is not permitted.

The task force notes, however, that this approach may be appropriate, as discussed in paragraph 4.79, when testing for the reasonableness of the aggregated sum of the fair value measurements of the entity's individual reporting units to its market capitalization.

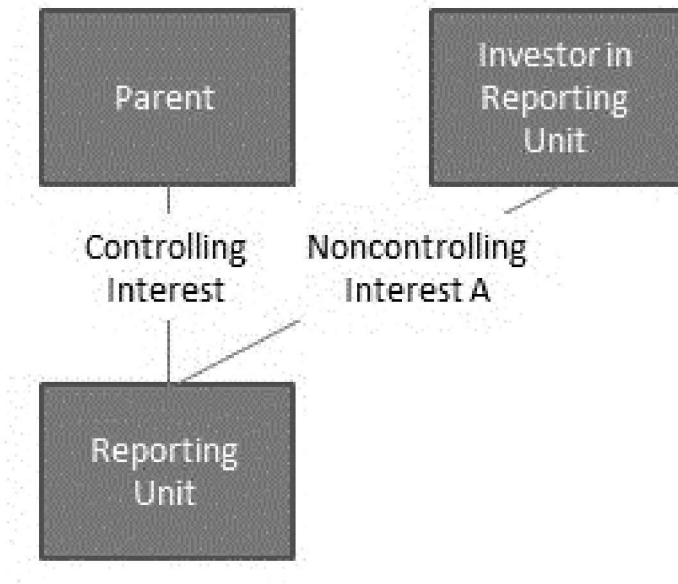
Effects of Noncontrolling Interest When Measuring the Fair Value of the Reporting Unit

4.09 The fair values of controlling and noncontrolling interests may be recorded on a different per-share fair value. One reason for a difference could be the inclusion of a control premium in the per-share fair value of the controlling interest in the reporting unit or, conversely, the inclusion of a discount for lack of control in the per-share fair value of the noncontrolling interest.

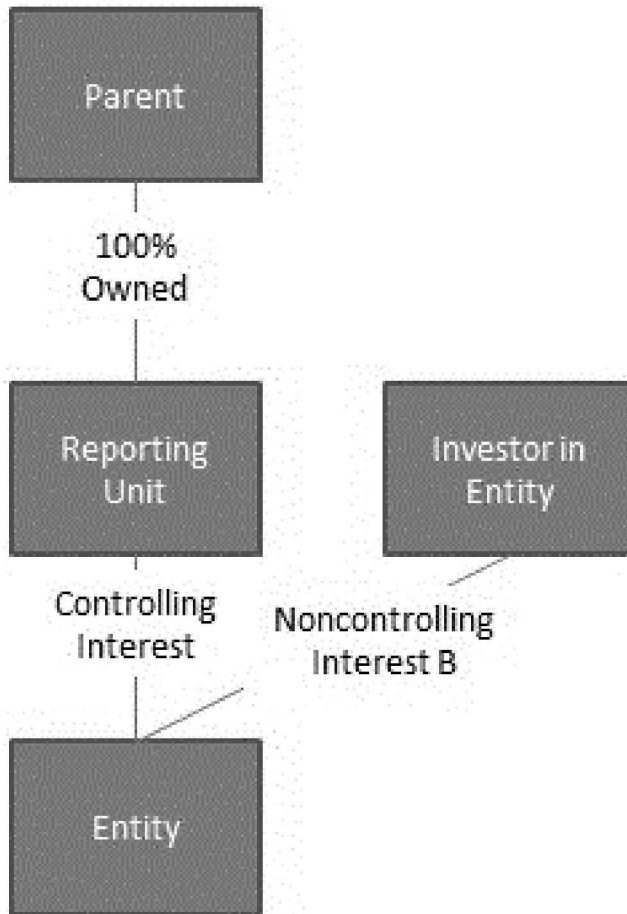
4.10 A control premium generally represents the amount paid by a new controlling shareholder for the benefit of controlling the acquiree's assets and cash flows. The elements of *control* derived by an acquirer can be categorized as (a) benefits derived from potential synergies that result from combining the acquirer's assets with the acquiree's assets, and (b) the acquirer's ability to influence the acquiree's operating, financial, or corporate governance characteristics (for example, improve operating efficiency, appoint board members, declare dividends, and compel the sale of the entity).

4.11 Synergies, rights, and preferences will often benefit the acquiree as a whole, including the noncontrolling interest. When determining the fair value of the noncontrolling interest, entities would need to understand whether, and to what extent, the noncontrolling interest will benefit from those synergies. To derive a noncontrolling interest value from a controlling interest value, consideration of a discount for lack of control may be necessary to account for the synergies that would not transfer to the noncontrolling interest.

4.12 In the context of a goodwill impairment test, a noncontrolling interest can be present above the reporting unit, within the reporting unit, or both. For example, the reporting unit could be partially owned by its parent (see noncontrolling interest A in the following chart).



4.13 In another case, the reporting unit might be wholly owned while it consolidates an entity that is partially owned by the reporting unit (see noncontrolling interest B in the following chart).



4.14 FASB ASC 350-20-35-22 states that “[t]he fair value of a reporting unit refers to the price that would be received to sell the unit as a whole in an orderly transaction between market participants at the measurement date.” When the noncontrolling interest exists above the reporting unit, for the reporting unit to be sold as a whole, both the controlling and noncontrolling interest would be sold.

4.15 Because the fair value of a reporting unit refers to the price that would be received to sell the unit as a whole, the task force believes that when a noncontrolling interest exists above the reporting unit (see noncontrolling interest A in the chart in paragraph 4.12), the fair value of the controlling interest and the noncontrolling interest would likely be the same on a per-share

value basis. In other words, the sale of the reporting unit would likely result in the same per share value for the controlling interest and noncontrolling interest A, as both would likely participate in the exchange transaction at the same per share price, absent any rights or restrictions to the contrary. In contrast, when a controlling interest but not the entire interest in an entity is acquired in a business combination, the fair value on a per share basis of the noncontrolling interest of that entity that becomes an individual reporting unit may differ from the transaction price per share. For example, as the noncontrolling interest does not participate in the exchange transaction at the acquisition date, the inclusion of a discount for lack of control in the per-share fair value of the noncontrolling interest may be appropriate.

4.16 Conversely, when a reporting unit consolidates entities that are less than wholly owned (see noncontrolling interest B in the chart in paragraph 4.13), the sale of the reporting unit as a whole could continue to leave a noncontrolling interest outstanding (that is, the noncontrolling interest may not participate in the sale transaction of the reporting unit). The task force believes that when the noncontrolling interest is not expected to participate in the sale of the reporting unit, there may be a difference in the per-share fair value of the controlling and noncontrolling interests. This approach would determine a fair value for the goodwill impairment test consistent with the way in which the fair value of the reporting unit and the implied fair value of goodwill were determined when the reporting unit was originally acquired and accounted for under FASB ASC 805, *Business Combinations*, assuming that there are no changes in the ownership percentages between acquisition date and impairment test date.

Valuation Techniques

4.17 FASB ASC 820-10-35-24 states that “[a] reporting entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.” When measuring the fair value of a reporting unit, multiple valuation techniques are often used. FASB ASC 820-10-35-24B provides that “[i]f multiple valuation techniques are used to measure fair value, the results (that is, respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results.” See schedule 4.12 of the “Comprehensive Example” section, which illustrates a summary of the results of measuring the fair value of a reporting unit using multiple valuation techniques.

4.18 FASB ASC 820-10-35-25 states that

[v]aluation techniques used to measure fair value shall be applied consistently. However, a change in a valuation technique or its application (for example, a change in its weighting when multiple valuation techniques are used or a change in an adjustment applied to a valuation technique) is appropriate if the change results in a measurement that is equally or more representative of fair value in the circumstances.

4.19 The following sections and schedules illustrate fair value measurement techniques often used to measure fair value of a reporting unit. Specifically, the DCF method (a method under the income approach), the guideline public company method (a method under the market approach), and the guideline company transactions method (a method under the market approach)

will be discussed and illustrated. Discussion and illustration are also provided of weighting when multiple valuation techniques are used and of comparing fair value measurements to external fair value indications.

4.20 The detailed discussion and illustration of the DCF method (paragraphs 4.21–42, 4.86–87, and schedules 4.1–4.9 of the “Comprehensive Example” section), guideline public company method (paragraphs 4.44–72, 4.88, and schedules 4.10–4.10.2 of the “Comprehensive Example” section), and guideline company transactions method (paragraphs 4.73–83, 4.89, and schedules 4.11–4.11.1 of the “Comprehensive Example” section) included in this guide are performed at an *enterprise value* level, meaning that the resulting fair value measurement is for the enterprise value of the reporting unit. In order to convert an enterprise value to an *equity value*, the fair value of the debt is subtracted from the fair value of the enterprise. In many cases, the fair value of debt is assumed to be equal to its underlying book value. However, there may be situations when the fair value of debt may not be the same as its book value due to changes in underlying interest rates or nonperformance risk. In these situations, the fair value of debt would be measured in accordance with guidance in FASB ASC 820 assuming an orderly transaction between market participants. Consideration would be given to repayment terms of the debt, current interest rates on comparable debt, and nonperformance risk. The step 1 conclusion may be impacted when the fair value of debt does not equal the book value of debt. When no debt is assigned to the reporting unit, the fair value of the equity will be the same as the fair value of the enterprise, and the carrying amount of the reporting unit will be the same using either premise.

Using the Income Approach to Estimate Fair Value of a Reporting Unit

4.21 Paragraphs 1.09–11 provide a brief overview of the income approach. The valuation technique commonly used in applying the income approach to value a reporting unit is the DCF method (which is illustrated in schedules 4.1–4.9 of the “Comprehensive Example” section). When using the income approach, there are many factors to consider, some of which are discussed in greater detail in the following sections.

Treatment of Risk

4.22 The perceived risk of the cash flows being discounted determines the magnitude of the discount rate. Theoretically, investors are compensated, in part, based on the degree of inherent risk and, therefore, would require additional compensation in the form of a higher rate of return for investments bearing additional risk.

4.23 FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*,² and paragraphs 5–20 of FASB ASC 820-10-55 provide a framework for determining the appropriate discount rate for cash flows with a specific risk profile. They describe two basic techniques: the *discount rate adjustment* (formerly referred to as traditional)

² The Financial Accounting Standards Board (FASB) Concepts Statements were not codified; however, the task force believes that FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, provides relevant guidance and, therefore, included references to it in this guide. (FASB Concepts Statements are available at www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156317989.)

technique (DRAT) and the *expected present value* (or *expected cash flow*) *technique* (EPVT).

4.24 Under the discount rate adjustment technique, which is discussed in paragraphs 10–12 of FASB ASC 820-10-55, risk is assigned to, or incorporated into, the discount rate.³ The discount rate adjustment technique uses a single set of cash flows from the range of possible estimated amounts, whether contractual or promised or most likely cash flows. In all cases, those cash flows are conditional upon the occurrence of specified events. Those *conditional cash flows* are then discounted to present value using a risk-adjusted rate of return, or discount rate. The greater the perceived risk associated with the cash flows, the higher the discount rate applied to them, and the lower their present value.

4.25 FASB ASC 820-10-55-13 states that

[t]he expected present value technique uses as a starting point a set of cash flows that represents the probability-weighted average of all possible future cash flows (that is, the expected cash flows). The resulting estimate is identical to expected value, which, in statistical terms, is the weighted average of a discrete random variable's possible values with the respective probabilities as the weights. Because all possible cash flows are probability-weighted, the resulting expected cash flow is not conditional upon the occurrence of any specified event (unlike the cash flows used in the discount rate adjustment technique).

However, as indicated in FASB ASC 820-10-55-18

...to apply the expected present value technique, it is not always necessary to take into account distributions of all possible cash flows using complex models and techniques. Rather, it might be possible to develop a limited number of discrete scenarios and probabilities that capture the array of possible cash flows. For example, a reporting entity might use realized cash flows for some relevant past period, adjusted for changes in circumstances occurring subsequently (for example, changes in external factors, including economic or market conditions, industry trends, and competition as well as changes in internal factors affecting the reporting entity more specifically), taking into account the assumptions of market participants.

4.26 The expected present value technique has two variations:

- In method 1, the probability-weighted expected cash flows are first adjusted for systematic (market) risk by subtracting a cash risk premium (that is, risk-adjusted expected cash flows). Those risk-adjusted expected cash flows represent a certainty-equivalent cash flow, which is discounted at the risk-free interest rate. A certainty-equivalent cash flow refers to a probability-weighted expected cash flow, adjusted for risk so that a market participant would be indifferent to trading the certain cash flows for the risky probability-weighted expected cash flows. The Black-Scholes model is an example of this method; risk-neutral simulation techniques and lattice models are other examples. In practice, the task force believes it is impractical to directly assess the certainty-equivalent cash flows for an

³ Typically, a discounted cash flow method uses after-tax cash flows and employs an after-tax discount rate. The use of pretax cash flows generally is inconsistent with how value ordinarily is measured in a discounted cash flow method. In any case, the cash flows and the discount rate used (after-tax or pretax) should be consistent (that is, pretax cash flows should not be used with after-tax discount rates and vice versa).

entity or its equity securities, so aside from Black-Scholes and other techniques that use a risk neutral framework, method 1 is rarely used.

- In method 2, the probability-weighted expected cash flows are adjusted for systematic (that is, market) risk by applying a risk premium to the risk-free interest rate. Accordingly, the cash flows are discounted at a risk-adjusted rate of return that corresponds to an expected rate associated with these probability-weighted cash flows (that is, an expected rate of return). Models used for pricing risky assets, such as the capital asset pricing model, can be used to estimate the expected rate of return. As in the discount rate adjustment technique, the greater the perceived risk associated with the expected cash flows, the higher the discount rate associated with it. Because in this method all possible cash flows are probability weighted, the resulting expected cash flow is not conditional upon the occurrence of any specified event, unlike the cash flows used in the discount rate adjustment technique. Thus, the overall discount rates used in discounting probability-weighted cash flows are often lower than those used in discounting single best estimate (success) cash flows, all else being equal. Note, however, that probability-weighted cash flows are not the same as certainty-equivalent cash flows, and the discount rate used would still be significantly higher than the risk-free rate.

4.27 In either case, the overriding principle contained in those techniques is that the discount rate used to discount the prospective cash flows should reflect assumptions that are consistent with the risks inherent in the cash flows. Conditional cash flows are discounted using a conditional rate, and expected cash flows are discounted using an expected rate. In theory, the two techniques consider the same risks; the DRAT reflects the risk through adjustments to the discount rate,⁴ whereas the EPVT primarily reflects this risk in the expected cash flows.

4.28 FASB ASC 820 does not limit the use of present value techniques to measure fair value to these three choices. There are many elements of risk that may be handled by adjusting the level of expected cash flows or the discount rate or both.

4.29 Both the DRAT and EPVT involve subjectivity either in selecting an appropriate discount rate or in assigning probabilities to cash flow outcomes. Generally, if applied properly, both the DRATs and EPVTs would be expected to produce consistent results. The task force also recognizes that valuation specialists are often faced with a single scenario with respect to *prospective financial information (PFI)* and that scenario may have additional risks that would be best accounted for under the DRAT.

Measuring Final Cash Flow Amount or Terminal Value

4.30 The terminal value represents the reporting unit's value as of the end of the discrete cash flow period in a discounted cash flow model, when earnings are expected to stabilize. The discrete period needs to be long enough

⁴ Adjustments to discount rates are beyond the scope of this guide as this topic is not unique to valuation of a reporting unit for goodwill impairment testing purposes. However, various resources exist in general valuation literature discussing derivation of discount rates.

for the entity to reach a steady state, which generally possesses the following characteristics:

- The entity grows at a constant rate and reinvests a constant proportion of its operating profits into the business each year.
- The entity earns a constant rate of return on new capital invested.
- The entity earns a constant return on its base level of invested capital.

4.31 The discrete period often represents a significant component of the total reporting unit value. Acceptable and commonly used methods for calculating a terminal value include a long-term growth rate method such as the *Gordon growth model*, the *two-stage growth method*, the *H-Model method*,⁵ and the observed (exit) market multiple method. After applying one of these methods, the terminal value is incorporated into the DCF calculation by discounting the future value of the terminal value to a present value.

4.32 If a terminal value is estimated using an exit multiple method, and the *weighted average cost of capital* is deemed to be an appropriate basis for the discount rate, the best practice for determining whether the terminal value is reasonable is to calculate the implied growth inherent in the selected exit multiple. For mature companies, the following variation of the Gordon growth model could be used:

$$\text{Discount Rate} - \frac{\text{Terminal Cash Flow}}{\text{Calculated Terminal Value}} = \text{Implied Long-Term Growth Rate}$$

4.33 For early stage companies, alternative approaches (for example, using declining growth rates over time in combination with a long-term *cost of capital*) may be more appropriate. A probability based scenario as described in paragraph 4.25 may also be appropriate.

Adjustments to Prospective Financial Information

4.34 Estimating cash flows to be used when applying a DCF method typically begins with management’s strategic plan for the reporting unit being valued. It is often necessary for adjustments to be made to those amounts to ensure consistency with the valuation objective of estimating the fair value of the reporting unit under the framework of FASB ASC 350. Although not an exhaustive list, the following considerations and adjustments might be necessary, some of which are illustrated in schedule 4.3 of the “Comprehensive Example” section:

- *Planned acquisition activity.* Prospective cash flows associated with assumed acquisition activity may overstate the fair value of the

⁵ The common theme among various long-term growth methods is that a long-term growth method estimates terminal value based upon the present value of estimated future cash flows. The Gordon growth model is used when the entity is expected to have a stable long-term growth rate in the terminal period. The two-stage method is used when the entity is expected to have an initial phase of higher growth in the terminal period followed by a subsequent phase of stable long-term growth. The H-Model is similar to the two-stage method except the initial phase of higher growth is not constant but declines linearly over time to reach the subsequent phase of stable long-term growth.

reporting unit relative to the carrying amount. This difference occurs when positive returns from the assumed acquisition are included in the PFI and the corresponding cash flow calculation. Generally, market participant cash flows would not include assumptions for acquisition activity; therefore, assumed acquisitions are typically removed from cash flow estimates. This adjustment is illustrated in schedule 4.3 of the “Comprehensive Example” section; revenue, expenses, and other adjustments to cash flow associated with the future acquisition are reflected in the PFI.

- *Working capital.* The DCF method results in an indication of fair value that is consistent with normal levels of working capital. To the extent that the reporting unit has excess or deficit positions of net working capital as of the measurement date, this amount would be an adjustment to the concluded fair value of the reporting unit. Some of the items to consider in connection with working capital are as follows:
 - *Cash.* Cash is generally excluded from working capital for goodwill impairment testing purposes.⁶ However, in some cases an operational amount of cash may be included in working capital.
 - *Debt.* Net working capital is generally calculated on a debt-free basis by excluding current portion of funded long-term debt.
 - *Deferred revenue.* Consistent with guidance in paragraph 2.2.07 of the Appraisal Foundation document setting forth best practices for *The Identification of Contributory Assets and the Calculation of Economic Rents*,⁷ if the revenue component of the PFI was developed on an accrual basis, then it likely would be appropriate to include the deferred revenue as a component of working capital.
- *Nonoperating assets and liabilities.* To the extent a reporting unit has nonoperating assets or liabilities as of the measurement date reflected in the carrying amount of the reporting unit, these amounts would be adjustments to the fair value of the reporting unit. For example, amounts included on a reporting unit balance sheet for investments accounted for under the equity method need to be analyzed to see whether the PFI and corresponding discounted cash flows reflect the impact of owning the investment. If the impact is not included, the fair value of these investments would need to be added to the DCF indication of fair value.
- *Legal form of reporting unit.* Some reporting units are held as or within partnerships, limited liability companies (LLCs), or other pass-through entities. With these legal forms, the reporting unit is not subject to the payment of income taxes. The task force believes that, generally, market participants would be in the legal form of C corporations and, thus, subject to income taxes. Accordingly, in most cases, for reporting units held as or within partnerships, LLCs, or other pass-through entities, the discounted cash flows would be

⁶ In this example cash is excluded from working capital.

⁷ The Appraisal Foundation document setting forth best practices for *The Identification of Contributory Assets and the Calculation of Economic Rents* is available at the Appraisal Foundation's website at <https://appraisalfoundation.sharefile.com/d/s80f9c7da9e744de9>.

calculated on an after-tax basis (corporate level) to ensure consistency with market participant assumptions (even though the reporting unit is not currently subject to income taxes). In certain limited circumstances, however, pass-through entity traits may be present among both buyers and sellers and, thus, may influence the development of market participant assumptions such that the effect of income taxes on the valuation of the reporting unit may be more complicated to determine. In these circumstances, entities may need to consider obtaining assistance from tax professionals.

- *Depreciation and amortization amounts.* Depreciation and amortization are not cash flow items and, thus, represent adjustments to management's strategic plan amounts, as shown on schedule 4.2 of the "Comprehensive Example" section. However, tax depreciation and tax amortization benefits result in cash tax savings that would need to be included in the cash flow calculation supporting the estimate of fair value. In situations in which book depreciation and amortization are reflected in the PFI, the task force believes one would need to ensure that the use of book measurements would not otherwise distort the analysis due to large differences between tax and book bases. (The tax amortization benefit calculation is illustrated in schedule 4.7 of the "Comprehensive Example" section.) Depreciation and capital expenditures are often equal in the terminal period calculation under the presumption that all amounts expended for capital investment will eventually be recovered through depreciation deductions. Capital expenditures may be slightly higher than depreciation in the terminal calculation if this calculation reflects an element of inflation. In this case, the cash outflow of capital expenditures represents current dollars expended whereas the depreciation recovery represents historical cost basis.
- *Share-based compensation.* Management's PFI may include an adjustment for share-based compensation to arrive at free cash flows or debt free cash flows because this is a noncash expense. Whether applying an income or market approach, the task force believes noncash expenses associated with share-based payments should be included as a cash outflow. This adjustment would be needed to the extent such expenses are thought to be compensatory in lieu of cash and, therefore, similar in nature to other accruals included in PFI. This adjustment is illustrated in schedule 4.3 of the "Comprehensive Example" section.
- *Fixed and variable costs.* Management's strategic plan needs to be assessed to ensure that imbedded assumptions about fixed and variable cost trends are consistent with those of market participants. For example, if an entity is experiencing profits greatly exceeding competitor profits, but that are still reasonable given the entity's current position in the marketplace, consideration would need to be given to the current operating leverage and whether it can be sustained into perpetuity given the barriers to entry and potential competition absorbing market share.
- *Income tax rate.* The task force believes that the appropriate tax rate would generally represent statutory rates adjusted for assumptions that are observable and applicable to market participants (for example, research and development credits which are applicable to market participants). The task force recommends starting with the statutory tax rate of the reporting entity and comparing it to the

entity's historical effective tax rate and industry data. Based on this comparison, the entity would determine whether it is necessary to adjust the statutory rate of the reporting entity to reflect the market participant assumptions. One would need to understand specific tax circumstances of the reporting entity, such as net operating loss carry-forwards, penalties, and special payments, as well as economic conditions and other factors that could cause the reporting entity's historical rate, industry data, or other rates considered in the analysis to temporarily deviate from the statutory rate.

- *Related party transactions.* Intercompany transactions may require adjustment if the terms are not consistent with what market participants would expect to incur or receive. For example, captive manufacturing or finance subsidiaries with breakeven pricing to a related entity would not represent market participant assumptions to either the reporting unit providing or receiving the product or services. Additionally, management fees or other payments to control owners reflected in the PFI of a reporting unit needs to be assessed for reasonableness because these amounts should be consistent with expectations of market participants.
- *Interest-bearing operating debt.* When interest-bearing operating debt is determined to be included in the carrying amount of a reporting unit as a working capital item, the interest expense on the interest-bearing operating debt would be treated as part of the cash flows.

Income Tax Considerations: Taxable Versus Nontaxable Determination

4.35 Unlike the determination of the carrying amount of a reporting unit, FASB ASC 350-20-35-25 states that

[b]efore estimating the fair value of a reporting unit, an entity shall determine whether that estimation should be based on an assumption that the reporting unit could be bought or sold in a nontaxable transaction or a taxable transaction. Making that determination is a matter of judgment that depends on the relevant facts and circumstances and must be evaluated carefully on a case-by-case basis.

4.36 In making the determination whether the estimation of the fair value of a reporting unit should be based on an assumption that the unit could be bought or sold in a nontaxable transaction or a taxable transaction, FASB ASC 350-20-35-26 states that

...an entity shall consider all of the following:

- a. Whether the assumption is consistent with those that marketplace participants would incorporate into their estimates of fair value [discussed in paragraph 4.37 of this guide]
- b. The feasibility of the assumed structure [discussed in paragraphs 4.38–40 of this guide]
- c. Whether the assumed structure results in the highest and best use and would provide maximum value to the seller for the reporting unit, including consideration of related tax implications [discussed in paragraphs 4.41–42 of this guide]

4.37 The task force believes the following may be useful to consider when evaluating the nontaxable versus taxable assumption:

- *Structure of observed comparable transactions in the market.* These transactions may be analyzed to determine if they were structured as nontaxable or taxable transactions. Consideration needs to be given to the nature and timing of the observed transactions and the relevant terms and conditions, the objective being to align the facts and circumstances of observed transactions with those present in the reporting unit subject to valuation.
- *Type of buyer.* The buyers in the observed transactions may be analyzed to determine whether they represent financial or strategic buyers. This assumption would need to be compared with other external analyses, such as the availability of synergies or other elements of control to the market participant buyer.
- *Tax status of market participant.* The tax status of a market participant in the observed transaction may be analyzed to determine whether it reflects the attributes of a taxable or nontaxable transaction. For pass-through entities (partnerships, LLCs, S corporations), it is unlikely any deferred tax assets or liabilities will be reflected on the balance sheet and, thus, the reporting unit(s) subject to fair value measurement, because these entities do not typically incur income taxes. Regardless, it is necessary that the assumed transaction structure consider whether the tax status of a market participant would reflect the attributes of a taxable or nontaxable transaction as it may be concluded the market participant would not be a pass-through entity.

4.38 FASB ASC 350-20-35-27 states that

[i]n determining the feasibility of a nontaxable transaction, an entity shall consider, among other factors, both of the following:

- a. Whether the reporting unit could be sold in a nontaxable transaction
- b. Whether there are any income tax laws and regulations or other corporate governance requirements that could limit an entity's ability to treat a sale of the unit as a nontaxable transaction

4.39 The task force believes that the absence of a legal entity consistent with the reporting unit may not be sufficient to support an assertion that a nontaxable transaction is not feasible if a legal entity could be formed to transfer the net assets of the reporting unit.⁸ Also, the task force believes that the nature of the reporting unit's assets and liabilities may affect the feasibility of a nontaxable transaction. For example, a reporting unit subject to material litigation may not be permitted to structure a nontaxable transaction if market participants would not be willing to assume the potential litigation liability.

4.40 The task force believes if a defensible position can be sustained about the feasibility of one transaction structure over another using qualitative arguments, there may be a supportable position that additional quantitative analysis regarding net proceeds (pursuant to paragraph 4.36c) of a nontaxable versus taxable transaction is not warranted. If both transaction structures are

⁸ Entities may need to consult with tax professionals to determine the feasibility of specific tax structures.

feasible but market participants would favor one over the other, the market participant transaction structure would be used. If both transaction structures are feasible and used by market participants, additional analysis would be performed to estimate which transaction structure is likely to result in higher proceeds, net of taxes, to the seller.

4.41 One method of quantifying the gross proceeds under a nontaxable versus taxable transaction is to construct discounted cash flows under each scenario (as is illustrated in schedules 4.5–4.9 of the “Comprehensive Example” section). For a nontaxable model (illustrated in schedule 4.5 of the “Comprehensive Example” section), the task force recommends considering the following general guidelines:

- Revenue and operating expenses need to follow management’s PFI and reflect assumptions consistent with a market participant perspective (see schedule 4.4 of the “Comprehensive Example” section).
- Tax depreciation and amortization needs to be reflected through the discrete period cash flows based on the assets carryover tax basis. Identifying tax depreciation and amortization amounts often requires the assistance of entity tax personnel or external advisers. See paragraph 4.34 for further discussion of depreciation and amortization.
- The remaining benefit relating to the amortization of carryover intangibles beyond the discrete period needs to be included on a present value basis as a lump sum addition to concluded fair value of invested capital. The benefits of the carryover tax amortization may extend beyond the discrete period reflected in the PFI, but they do not represent a benefit that will be available into perpetuity because the underlying intangible assets have a finite period of tax amortization, usually 15 years per Internal Revenue Code (IRC) Section 197. Therefore, the benefit reflected in the nontaxable model only reflects the tax benefits associated with the carryover amortization of intangible assets.
- Other tax attributes such as net operating loss carry forwards need to be reflected in the DCF subject to IRC Section 382 limitations. Note that these amounts are included in the analysis even if the entity has a full valuation allowance against the deferred tax asset associated with this amount as the market participant would make the determination about the potential utilization of these attributes, not the seller.
- The present value of the anticipated future cost savings attributable to synergies is included as an additional component of value because it is not otherwise reflected in the DCF method.

4.42 The task force recommends that the following additional guidelines be considered for a taxable model (which is illustrated in schedule 4.7 of the “Comprehensive Example” section):

- Depreciation would need to reflect the use of the stepped up tax basis and depreciation based on the Modified Accelerated Cost Recovery System category (see schedule 4.7.1 of the “Comprehensive Example” section).
- The analysis would not reflect a separate line item for amortization. Note this difference compared to the nontaxable model (see schedule 4.5 of the “Comprehensive Example” section).

- The benefit relating to the amortization of intangibles could be reflected on a present value basis as a lump sum addition to the fair value of invested capital. Note that this is the same as the typical IRC Section 197 benefit that is observed in business combinations.

Using the Market Approach to Estimate Fair Value of a Reporting Unit

4.43 Paragraphs 1.12–.16 provide a brief overview of the market approach. Two commonly used valuation techniques for measuring the fair value of a reporting unit under the market approach are the guideline public company method (which is illustrated in schedules 4.10–4.10.2 of the “Comprehensive Example” section) and the guideline company transactions method (which is illustrated in schedules 4.11–4.11.1 of the “Comprehensive Example” section). When using the market approach, there are many factors to consider, some of which are discussed in greater detail in the following sections.

Considerations in Applying the Guideline Public Company Method

Identification of Guideline Public Companies

4.44 For companies whose stock is publicly traded, information about pricing, trading, and financial data for those companies is generally available. The task force believes that a guideline company’s stock would need to have sufficient trading volume such that the trading prices are indicative of an *active market*.

4.45 When identifying guideline public companies to be used in a market approach, it is helpful to consider what makes a company comparable, from a valuation standpoint, to the subject reporting unit. Operational and financial characteristics are considered to be factors of comparability and help determine those companies that have the most similar earnings capacity and relative levels of investment risk. Many sources⁹ of public company data are searchable by these key factors that can aid in identifying potential guideline public companies. Factors of comparability often include the following:

- Similar operational characteristics, such as
 - same industry or sector (the North American Industry Classification System or the Standard Industrial Classification code);
 - similar lines of business;
 - geographic reach (for example, domestic versus international versus multinational);
 - similar customers and distribution channels;
 - contractual versus noncontractual sales;
 - seasonality of the business;
 - similarity of business cycle (for example, short cycle characterized by ever-changing technology versus long cycle driven by changes in commodity pricing);

⁹ As of the date of publication of this guide, third-party data vendors and publications included, but were not limited to, Capital IQ, MergerStat, Bloomberg, FactSet, and Compustat.

- similar stage of business life cycle (start up, high growth, mature, and so forth); or
- similar operating constraints (for example, reliance or dependence on key customers or government regulations).
- Similar financial characteristics, such as
 - similar size (for example, revenues, assets, or market capitalization, if subject is public);
 - similar profitability (for example, earnings before interest, taxes, depreciation, and amortization [EBITDA], operating margin, contribution margin);
 - similar anticipated future growth in revenues and profits;
 - similar asset-base (for example, manufacturing versus service business); or
 - similar pattern of owning versus leasing real properties, machinery, and equipment (for example, an entity that owns its manufacturing operations versus one that leases the building and machinery used for its operations).

4.46 The process of selecting appropriate guideline companies will often include an analysis that summarizes the comparability of financial statistics, such as size, profitability, and growth, between the guideline companies and the subject reporting unit. Other comparative financial ratios may also be included. This type of ratio analysis is also useful in selecting relevant market multiples to apply to the subject reporting unit.

4.47 Not all of the factors listed in paragraph 4.45 will be applicable in every circumstance, and there may be other important factors to consider, some of which may be industry specific. When performing the analysis, the factors of comparability are determined and public company data is screened to identify the best set of guideline public companies that meet these criteria.

Number of Guideline Companies Selected for Comparison

4.48 The number of guideline companies identified will vary based on facts and circumstances. Although in some cases there may be only one or two public companies that are considered closely comparable to the subject reporting unit, in many cases there will be more. Furthermore, there may be public companies that exhibit some, but not all, of the factors of comparability. There also may be situations in which a primary set of guideline companies may be accompanied by a secondary, less comparable, but corroborating set of guideline companies (for example, a primary set of guideline companies could be apparel retailers focused on children's clothing, and the secondary corroborating set might be all apparel retailers of similar size, growth, and profitability to the subject reporting unit, regardless of consumer focus). In all cases, the guideline companies selected need to reflect companies that are sufficiently similar to the subject reporting unit being tested.

How to Calculate Multiples and Which Multiples to Use

4.49 Once the guideline companies have been identified, financial information is gathered on each and comparative metrics that can be applied to the subject reporting unit are calculated. These metrics, commonly called *multiples*,

are typically ratios of enterprise value or market value of equity to an underlying financial data point such as revenue, EBITDA, net income, or book value. Any relevant multiple can be used. Some commonly used multiples include the following:

- Market value of equity (MVE) to net income
- MVE to book value of equity
- Enterprise value¹⁰ (EV) (excluding cash)¹¹ to earnings before interest and taxes
- EV (excluding cash) to EBITDA
- EV (excluding cash) to revenues
- EV (excluding cash) to debt-free cash flow
- EV (excluding cash) to book value of assets

4.50 These multiples can be calculated on a historical basis or a forward looking basis. The selection of historical versus forward looking multiples requires judgment about which measure(s) are most likely indicative of a normalized level of operations going forward.

4.51 Historical basis multiples may include the latest fiscal year and latest 12 months (LTM) or historical averages, such as the average of the last 3 years. Forward looking multiples may include the estimated current fiscal year, next 12 months (NTM), next fiscal year, or future fiscal years (2 or 3 years into the future).

4.52 The task force believes that multiples should be applied consistently between guideline companies and subject reporting units. For example, LTM multiples would be applied to the subject reporting unit's LTM performance. NTM multiples would be applied to the subject reporting unit's NTM anticipated future performance. It would not be appropriate to apply LTM multiples to the subject reporting unit's anticipated future performance. In order to use forward looking multiples, it is necessary to obtain estimates (for example, from analysts' reports) of future performance of each guideline company.

4.53 When calculating multiples, EV multiples are typically paired with enterprise level-based financial metrics (for example, revenues or EBITDA), and equity market values are typically paired with equity-based financial metrics (for example, net income and book value of equity). The financial metrics that are applicable to the subject reporting unit valuation are selected based on the subject reporting unit's industry, stage of development, growth, profitability, and other relevant factors.

4.54 When EV is calculated net of cash, the value that results from applying this multiple to the subject reporting unit would also exclude the value

¹⁰ The numerator of an enterprise value (EV) multiple is typically calculated as follows: stock price times the number of shares outstanding, plus preferred shares, plus noncontrolling interest, plus the fair value of debt. In this guide, it is assumed, as a practical expedient, that when calculating guideline company EV multiples, the book value of a guideline company's debt is an estimate of its fair value. Enterprise value may also be referred to as invested capital, market value of invested capital (MVIC), or total enterprise value.

¹¹ External data sources may already exclude cash in their calculation of EV in which case the adjustment may not be necessary. However, as defined in the glossary, for purposes of this guide, EV is considered to include cash and cash equivalents. Because the amount of nonoperating cash may not be comparable across otherwise similar businesses, it is appropriate to estimate multiples using the comparable EVs excluding cash, to multiply by the metrics of the reporting unit to be valued, and then to add back the reporting unit's nonoperating cash.

of the subject reporting unit's cash. When this is the case, the subject reporting unit's cash is added to the results of the market approach.

4.55 There may be situations in which adjustments to a guideline company for nonoperating assets are necessary for significant identifiable items, such as investments in an unconsolidated subsidiary or joint venture accounted for under the equity method, unused land adjacent to plant or facility, or corporate headquarters located in an area where the price of real estate is high. The objective for making these adjustments is to enhance the comparability between the guideline companies and the subject reporting unit.

4.56 Nonfinancial metrics sometimes used by industry and analysts also may be used by valuation specialists and include, for example,

- price per subscriber in the cable industry;
- price per bed in the hospital industry;
- EV (excluding cash) to research and development investment in the biopharmaceuticals industry; and
- other industry-specific metrics.

4.57 A nonfinancial metric is often industry specific and would ordinarily be used by a valuation specialist when the nonfinancial metric is generally accepted in the industry and would be considered by the market participants. In addition, with many early-stage entities, some traditional metrics cannot be used because the entities have not yet earned a profit and, therefore, nonfinancial metrics may be used in conjunction with the limited number of usable financial metrics. The task force recommends corroborating these metrics with other methodologies whenever possible.

Adjustments to Guideline Public Company Multiples to Enhance Comparability

4.58 The purpose of making adjustments to observable multiples is to put the guideline company on a more comparable basis to the subject reporting unit. If identified guideline companies exhibit certain differences to the subject reporting unit but are otherwise deemed to be reasonably good comparative benchmarks, the observable multiples for the guideline companies can be adjusted to account for these differences. Such adjustments relate to factors including profitability, anticipated growth, size, working capital, nonrecurring or nonoperating income or expenses, or differences in accounting policies or principles (such as U.S. generally accepted accounting principles [GAAP] versus International Financial Reporting Standards).

Adjustments to Subject Reporting Unit Financial Data

4.59 Market multiples are applied to subject reporting unit financial data that is considered to be normalized and, therefore, indicative of a normal level of operations going forward. Potential adjustments to subject reporting unit financial data that is not already on a normalized basis are infrequent, but might include the following:

- Removal of significant nonrecurring income or expenses (for example, a one-time restructuring charge)
- Removal of nonoperating income or expenses associated with nonoperating assets or liabilities of the subject reporting unit

- Removal of intercompany management fees that are not indicative of expenses the subject reporting unit would incur if it operated on a standalone basis
- Addition of imputed expenses that are not charged by corporate to the subject reporting unit but that would be incurred by a market participant operating that reporting unit on a standalone basis (for example, royalty for use of the corporate brand name)

Elimination of Multiples That Are Not Meaningful

4.60 Once multiples have been calculated they are analyzed for meaningfulness. Outliers considered to be “not meaningful” are eliminated from the data set. For example, public companies in distress whose earnings have fallen faster than their stock price may have a very high EV-to-EBITDA multiple. In a set of guideline companies with the majority of EV-to-EBITDA multiples ranging from 8x to 10x, and with one outlier of 30x EBITDA for a guideline company in distress, the outlier is eliminated from consideration, assuming the subject reporting unit is not also in distress.

4.61 In general, multiples for a dataset of guideline companies that are in a narrow range are generally better indications of value than a dataset of multiples that exhibit wide dispersion. Statistical measures can be calculated to assist in analyzing the dispersion of multiples within a dataset, though statistical calculations are not required if the analysis can be performed through other means (for example, qualitative assessments).

How to Select Multiples to Apply to the Subject Reporting Unit

4.62 The following factors, discussed in paragraphs 4.63–.65, may be considered when selecting multiples to apply to the subject reporting unit.

4.63 The median and mean (average) multiple are often calculated for each dataset of guideline company market multiples. The high, low, and interquartile multiples are also sometimes calculated. However, selecting the relevant market multiple to apply to the subject reporting unit requires careful consideration. It is not sufficient to simply apply the median or mean multiple from the dataset without concluding that the median or mean is the most appropriate in the circumstances. Analysis needs to be performed to determine the key value drivers in the array of multiples and their correlation to financial metrics, including similarities and differences between the guideline companies and the subject reporting unit.

4.64 For example, EV-to-EBITDA multiples generally correlate to anticipated future growth in revenues and earnings. EV-to-revenue multiples generally correlate to profit margins. At a minimum, when using EV-to-EBITDA and EV-to-revenue multiples, the subject reporting unit’s anticipated future growth and profit margins are compared to each guideline company and the multiple selection is based on these factors. Regression analysis, though not required, can be a useful tool when analyzing the key value drivers affecting market multiples.

4.65 In certain instances, one or a few of the guideline companies might be considered to be most comparable. In these situations, the multiples of these companies may be relied upon most heavily in selection of multiples to apply to the subject reporting unit. In addition, there may be other important factors to be considered and some of these factors may vary by industry.

Weighting of Multiple Type

4.66 It is common to use more than one multiple type¹² in the market approach. The factors discussed in paragraphs 4.63–.65, which are important in the selection of multiple types, also apply in determining appropriate weightings. The level of reliance placed on a particular multiple type and the weighting assigned to the multiple type is a matter of judgment. In certain industries, certain multiple types are more widely used than others, and these would be expected to receive greater weighting.

4.67 It is not always appropriate to weigh each multiple type equally. Weighting of multiple types is based on judgments about the relative importance of each multiple type and quality of the dataset. When determining appropriate weightings, the facts and circumstances of each valuation assignment would need to be carefully considered.

Enterprise Versus Equity Level Multiples

4.68 Multiples based on enterprise value, or EV, are associated with enterprise value, whereas multiples based on equity, or MVE, are associated with equity value. An important consideration in application of a market approach is whether the market multiples being applied result in the value intended—enterprise value or equity value. If an enterprise value is desired and EV multiples are applied, no further adjustment is required. However, if an equity value is desired and EV multiples are applied, an adjustment to convert the resulting enterprise value to equity value needs to be made. This is typically achieved by subtracting from enterprise value the fair value of debt in the subject reporting unit. If there is no debt at the subject reporting unit level, the fair value of the subject reporting unit's equity would be the same as the enterprise's fair value. If an equity value is desired and MVE multiples are applied, no further adjustment is required.

Issues of Noncontrolling Versus Controlling Interest

4.69 Another consideration in applying the market approach is the basis of the valuation (that is, whether the resulting enterprise value would be considered controlling or noncontrolling).¹³ The guideline public company method has historically been regarded as indicating the enterprise or equity value on a noncontrolling basis, whereas the guideline company transactions method has historically been regarded as indicating the enterprise or equity value on a controlling basis.

4.70 Step 1 of the goodwill impairment test is considered to be a valuation of the subject reporting unit on a controlling interest basis. Therefore, in some cases, a control premium may be applied to convert the guideline public company method to a controlling interest basis. The magnitude of the control premium is based on consideration of multiple qualitative and quantitative factors. In some cases, it may be determined that no control premium would be applied.

¹² For example, EV-to-revenues and EV-to-EBITDA are two types of multiples.

¹³ In a goodwill impairment test, cash flows are assumed to be on a controlling interest basis when the income approach is used.

Cash and Nonoperating Assets

4.71 Methods under the market approach typically result in a value for the going concern business (the net operating assets) of the subject reporting unit. In some cases, the subject reporting unit may also have nonoperating assets in its carrying amount. Examples of nonoperating assets may include excess cash not required for working capital, an investment in an unconsolidated subsidiary or joint venture accounted for using the equity method, or unused land adjacent to a plant location. To the extent nonoperating assets exist within the subject reporting unit, the fair value of these nonoperating assets is added to the results of the methods under the market approach in order to have a meaningful comparison of fair value to carrying amount of assets in the subject reporting unit.

4.72 In addition, cash may require special consideration. If EV multiples are used, and if they are calculated using the “debt, net of cash” method, all cash, both operating and nonoperating, will have been excluded from the market multiples. When this is the case, all cash, both operating and nonoperating, is added to the value resulting from application of these multiples to determine the fair value of the subject reporting unit.

Considerations in Applying the Guideline Company Transactions Method

4.73 Most of the considerations that apply to the guideline public company method also apply to the guideline company transactions method, but a few differences exist. Following are some additional considerations in applying the guideline company transactions method.

Limitations on Availability of Data

4.74 When using the guideline company transactions method to value a subject reporting unit, limited data may be available on guideline company transactions. For example, some limitations may include the lack of information supporting the financial characteristics or the tax structure of the transaction.

Assessing Relevant Time Period for Guideline Company Transactions

4.75 It is not appropriate to use guideline company transactions that took place during periods in which economic conditions were not the same as they are at the goodwill impairment measurement date. There are no bright lines, but, in general, the older the transaction, the less relevant the information.

Number of Guideline Company Transactions Selected for Comparison

4.76 It is common practice to compare as many guideline company transactions as can be identified during a relevant recent historical time period as possible. If the transaction price has not been disclosed, a transaction cannot be used as a guideline because it will not be possible to calculate any market multiples.

How to Select Multiples to Apply to the Subject Reporting Unit

4.77 Due to the limitations of the data, it may be difficult to make adjustments to the multiples for differences in financial characteristics between the guideline company transactions and the subject reporting unit. As with the guideline public company method, market multiples need to be scrutinized and outliers labeled as “not meaningful.” Further, for some transactions, data may be available to calculate only one or a few multiples. As with the guideline public company method, a dataset of market multiples that are in a narrow range is generally a better indicator of the quality of the multiple than a dataset of multiples showing wide dispersion.

Noncontrolling Versus Controlling Interest

4.78 The guideline company transactions method is typically regarded as indicating the enterprise or equity value on a controlling, marketable basis. Generally a premium for control would not be applied to the guideline company transactions method.

Comparison of Fair Value Measurements to External Fair Value Indications

4.79 When a significant portion of the reporting entity is subject to fair value measurement, the task force believes a best practice in evaluating the reasonableness of the fair value measurements for an entity’s individual reporting units is to compare and explain differences between the aggregated sum of the fair value measurements of the entity’s reporting units to external fair value indications for the entire entity. Accordingly, if portions of the entity were not subject to fair value measurement, it may be necessary to estimate the fair value of those portions.

4.80 For privately held entities, one method for testing reasonableness of the aggregated sum of the fair value measurements of the entity’s reporting units is to compare to an estimate of the fair value of the entire entity on a marketable controlling basis. An estimate of the fair value of the entire entity on a marketable controlling basis can be accomplished by applying traditional valuation techniques (income, market, and asset approaches). The aggregate value of the individual reporting units is compared to the overall entity value indication and differences need to be explained to the extent possible, or underlying assumptions for any of the underlying valuations need to be reconsidered, until a reasonable comparison is completed.

4.81 For entities with publicly traded equity securities, the method most frequently employed for testing reasonableness of the aggregated sum of the fair value measurements of the entity’s reporting units is to compare to the observed market capitalization of the entity¹⁴ and analyze the implied control premium. Given the degree of volatility that all entities experience with market capitalization, in making this comparison it may not always be reasonable to look at a single day’s market capitalization (date of goodwill impairment

¹⁴ In cases in which trading volume of shares is suggestive of a thinly traded issue, the resulting share price may be argued as not possessing a high level of reliability as an indicator of market value. In this situation, the task force recommends conducting further inquiry as to the facts and circumstances surrounding the trading levels and the trades that have occurred to determine if a comparison to market capitalization is nevertheless possible. If not possible, comparison to an external fair value indication would need to be performed as if the entity were privately held.

testing). Therefore, the task force believes that although averaging may be appropriate in some circumstances, it is not appropriate to use averaging in order to mitigate either increasing or decreasing trends in market capitalization.

4.82 All facts and circumstances need to be considered when completing the comparison to market capitalization. The task force believes that as the difference between the fair value conclusion and market capitalization widens (that is, the implied control premium increases), the amount of evidence supporting the implied control premium would also need to increase. When evaluating the reasonableness of the implied control premium, it may be helpful to consider the potential of market participants to enhance cash flows or lower the required return of the subject reporting unit, as well as observed transaction data and any additional external evidence supporting the conclusion. Additionally, it may be necessary to assess the most likely universe of buyers in the market place, the level of activity in the markets, and the existence of at least two bidders to support a control premium. See schedules 4.13–4.14 of the “Comprehensive Example” section for an illustration of comparison of fair value measurement to external fair value indications.

4.83 The task force believes it is a best practice to identify and document significant differences between the aggregate fair value and the observable capitalization, including such factors as the following (some of which are illustrated in schedule 4.14 of the “Comprehensive Example” section):

- *Control synergies.* Often in a control transaction the buyer expects to remove redundant costs or to leverage new revenue sources by combining operations with the target. These specific income and expense items can be reflected directly in the cash flows in the DCF method as market participant assumptions. It may be necessary to consider the nature, timing, and magnitude of these adjustments, as well as how they might be allocated among buyer and seller. Also, note that attaining the synergistic levels of performance may carry a higher degree of risk, and the DCF method may reflect this condition in the selection of the discount rate. Achieving revenue synergies as compared to cost reduction synergies could have an impact on the discount rate selected. The risk associated with eliminating a cost may be less than that with deriving incremental revenue. The magnitude of the cost reductions or incremental revenue could also have an impact on the discount rate selected. As the level of cost reductions or incremental revenue increases, so may the risk of achievement.
- *Asymmetric data.* Management may have access to data or information that is not known outside the entity as of the valuation date, such as new revenue sources under development or cost saving initiatives to be implemented. Because such information is not known outside the entity, the information is not included in the external indication of fair value (share price), but it would be expected to be obtainable by buyers through due diligence efforts that are usual and customary. When applying a DCF method, this data may be reflected in PFI provided it is consistent with market participant assumptions. If the data can be specifically identified, valuation procedures may be applied to estimate the effect of this nonpublic information on the concluded fair value of the reporting units.
- *Tax consequences.* If the fair value of the reporting unit is calculated using a taxable basis (reflective of additional tax benefits), this

amount is typically not reflected in the observed share price, as the amount of potential step up would not be known absent an announced transaction.

- *Entity-specific versus market participant capital structures.* In assessing the overall cost of capital under FASB ASC 350, market participant assumptions drive the fair value of the reporting unit. In some situations, the amount of leverage selected to develop the cost of capital of the market participant is lower than that observed in the public entity. In such a situation, the underlying share price could reflect the risk of suboptimal leverage and, therefore, be inconsistent with the indicated fair value that utilizes an optimal capital structure.
- *Excessive short positions against the stock.* Excessive short positions against the stock could cause price volatility. The task force believes that a review of changes in a company's short interest position (increases or decreases) may need to be considered in making a comparison to market capitalization.
- *Controlling or large block interests.* Some publicly traded securities are in entities with controlling blocks or with large noncontrolling blocks that, nevertheless, have the ability to influence major decisions of the entity and, therefore, its share price. These blocks may or may not be associated with a thinly traded issue. The fair value measurement would need to consider whether there is an indication of the controlling interest's influencing of the shares or if there may be a motivating factor that creates a need to sell large blocks in the open market, such as debt maturities. In these cases, one would need to assess whether the observed market price utilized as part of the comparison to market capitalization has been affected in an abnormal manner.

Comprehensive Example

Note: This example is provided only to demonstrate concepts discussed in the preceding chapters of this guide and is not intended to establish requirements. Furthermore, the assumptions and inputs used in this example are illustrative only and are not intended to serve as guidelines. Facts and circumstances of each individual situation should be considered when performing an actual valuation.

Overview

4.84 The following sections include a comprehensive example of a valuation analysis used for performing steps 1 and 2 of the goodwill impairment test (for illustration of the qualitative assessment, see chapter 3, "Qualitative Assessment"). In this example, assume that ABC Company (company or ABC) is a U.S. based distributor of nondurable components which operates through two segments, East and West. Each of these segments satisfy the criteria to be defined as reporting units under guidance in FASB ASC 350-20. The company allocates its assets and liabilities to reporting units based on the criteria in FASB ASC 350-20. Some assets and liabilities do not satisfy the assignment criteria and reside on the books of the parent. All goodwill has been allocated to either the East or West Reporting Unit. This example focuses on the East Reporting Unit; amounts for the West Reporting Unit are given.

4.85 The following are additional facts related to this example:

- The PFI was analyzed and discussed with management to confirm that the PFI utilizes market participant assumptions. Adjustments to the PFI are reflective of market participant assumptions.
- Three approaches were considered in determining the fair value of the reporting unit: the income approach, the market approach, and the asset approach.
- Two approaches were used in determining the fair value of the East Reporting Unit: the income approach and the market approach.
- Under the income approach, the fair value of the East Reporting Unit was measured using the discount rate adjustment technique under the DCF method (see schedules 4.1–4.9).
- Under the market approach, the fair value of the East Reporting Unit was measured using the guideline public company method (see schedules 4.10–4.10.2) and the guideline company transactions method (see schedules 4.11–4.11.1).
- The results of measuring the fair value of the East Reporting Unit using the DCF method, the guideline public company method, and the guideline company transactions method were summarized (see schedule 4.12) and compared to external fair value indications (see schedules 4.13–4.14). Based on the facts presented in this example, the fair value of the East Reporting Unit determined in the step 1 test exceeded its carrying amount, therefore eliminating the need to perform the step 2 test.
- In order to illustrate step 2 of the goodwill impairment test, it is necessary that the fair value of the reporting unit be lower than its carrying amount. Accordingly, in this example, the fair value of the East Reporting Unit determined in the step 1 test was altered so that it is no longer greater than its corresponding carrying amount, therefore causing the failure of the step 1 test and requiring completion of the step 2 test (see schedules 4.15–4.16).
- Other assumptions and support are presented within the example.

Step 1 of Goodwill Impairment Test

Illustration of Applying the DCF Method to Measure the Fair Value of a Reporting Unit

4.86 This section illustrates a valuation analysis performed to measure fair value of a reporting unit under the DCF method using the discount rate adjustment technique. (See paragraphs 4.21–.42 for a discussion of some of the considerations in applying the income approach to measure the fair value of a reporting unit.) Cash flows to be used in a DCF method, including developing underlying assumptions, are the responsibility of management. In this example, a valuation specialist was provided by management with a single set of cash flows (in the form of the strategic plan) which represents the most likely cash flows for the reporting unit being valued (schedule 4.2). PFI and management's underlying assumptions, used for purposes of the goodwill impairment test, may need to be adjusted to be consistent with market participant assumptions (schedule 4.3). Relevant financial and nonfinancial measures of reliability, such as benchmarking to industry comparables and management's prior record of forecasting accuracy, need to be considered. Moreover, PFI

prepared for use in a valuation may need to be compared to prospective information that management prepares for the same periods for other purposes—for example, for bankers. A terminal value is calculated at the end of the discrete period. The discrete period is the period at the end of which PFI has stabilized. See paragraphs 4.30–33 for a discussion of terminal value.

4.87 Reference is made to the following schedules:

- *Schedule 4.1—Consolidating Balance Sheet and Carrying Amount Calculation as of the Measurement Date.* This schedule provides the carrying amounts of the West Reporting Unit, the East Reporting Unit, corporate, and consolidated. See paragraphs 2.19–37 for discussion of assigning assets and liabilities to reporting units.
- *Schedule 4.2—Prospective Financial Information, As Provided by Management.* This schedule presents the starting point for the development of cash flows to be used when applying a DCF method to measure the fair value of the East Reporting Unit. It represents management’s strategic plan based on GAAP with identified adjustments for those items without associated cash flows.
- *Schedule 4.2.1—Prospective Financial Information—Capital Expenditures, Depreciation (Including Acquisition Spend Impact) and Amortization (GAAP Basis).* This schedule presents the prospective annual depreciation and amortization for the East Reporting Unit as included in schedule 4.2 based on GAAP amounts. In this schedule, capital expenditures and depreciation amounts include the impact of acquisition spend. Note that GAAP annual depreciation and amortization will likely differ from amounts reported for income tax purposes.
- *Schedule 4.2.2—Prospective Financial Information—Capital Expenditures and Depreciation (Excluding Acquisition Spend Impact) (GAAP Basis).* This schedule reflects schedule 4.2.1 excluding acquisition spend impact. Depreciation adjustment in schedule 4.3 is the difference between total depreciation depicted in schedule 4.2.2 and schedule 4.2.1, respectively.
- *Schedule 4.3—Strategic Plan, Prospective Financial Information, Adjustments Reflecting Market Participant Assumptions.* This schedule presents proposed adjustments to management’s strategic plan as presented in schedule 4.2. Overall adjustments to a management prepared strategic plan may be necessary to ensure consistency with the underlying carrying amount and the overall objective of impairment testing. See paragraph 4.34 for discussion of these types of adjustments, some of which are illustrated in schedule 4.3.
- *Schedule 4.4—Adjusted Prospective Financial Information.* This schedule presents the net effects of the adjustments proposed in schedule 4.3 to the amounts presented in schedule 4.2.
- *Schedule 4.5—Business Enterprise Valuation: Income Approach—Discounted Debt-Free Cash Flow Method—Nontaxable Transaction.* This schedule presents the measurement of the fair value of the East Reporting Unit assuming the reporting unit would be bought or sold in a nontaxable transaction. See paragraphs 4.35–42 for a discussion of taxable versus nontaxable determination.
- *Schedule 4.5.1—Nontaxable Model—Carryover Tax Basis Depreciation and Amortization.* This schedule presents the prospective annual

depreciation and amortization for the East Reporting Unit as included in schedule 4.5 based on carryover tax basis.

- *Schedule 4.6—Weighted Average Cost of Capital Calculation.* This schedule illustrates the development of the weighted average cost of capital used in schedule 4.5.
- *Schedule 4.6.1—Weighted Average Cost of Capital Calculation—Select Market Data.* This schedule summarizes select market data used in the development of the weighted average cost of capital in schedule 4.6.
- *Schedule 4.7—Business Enterprise Valuation: Income Approach—Discounted Debt-Free Cash Flow Method—Taxable Transaction.* This schedule presents the measurement of the fair value of the East Reporting Unit assuming the reporting unit would be bought or sold in a taxable transaction. See paragraphs 4.35–42 for a discussion of taxable versus nontaxable determination.
- *Schedule 4.7.1—Taxable Model—Stepped Up Tax Basis Depreciation.* This schedule presents the prospective annual depreciation for the East Reporting Unit as included in schedule 4.7 based on a stepped up tax basis.
- *Schedule 4.8—Income Approach—Market Participant Cost Savings Valuation.* This schedule measures the present value of market participant cost savings for inclusion in the measurement of the fair value of the East Reporting Unit in both schedule 4.5 (nontaxable transactions) and schedule 4.7 (taxable transactions). The guidance in FASB ASC 350-20-35-23 (see paragraph 4.04) notes that the fair value of a reporting unit used for impairment testing may exceed its market capitalization because the basis for analysis in step 1 of the goodwill impairment test is that of a control buyer. This control buyer may be able to realize synergistic benefits from the assumed transactions that may include enhanced revenues and cost savings associated with items that are redundant in nature. Schedule 4.8 represents a DCF analysis of prospective expenditures that will be eliminated and represent cost savings synergies that comprise one element of premiums observed in control transactions. These cost savings have been presented separate from other analyses so the risk associated with attaining the magnitude and timing of the cost savings may be riskier than otherwise depicted in the analysis. As an alternative, these cost savings could be reflected within the PFI utilized in the DCF approaches shown on schedule 4.5 and 4.7.
- *Schedule 4.8.1—Weighted Average Cost of Capital Calculation—Market Participant Cost Savings Valuation.* This schedule illustrates the development of the weighted average cost of capital used in schedule 4.8.
- *Schedule 4.9—Analysis of Assumed Transaction Structure.* This schedule measures the anticipated net proceeds from an assumed nontaxable and taxable transaction with the structure producing the highest assumed net proceeds serving as the basis for the transaction structure assumption under the DCF method. See paragraphs 4.35–42 for a discussion of taxable versus nontaxable determination. As discussed in paragraph 4.35, FASB ASC 350-20-35-25 requires that “[b]efore estimating the fair value of a reporting unit, an entity shall determine whether that estimation should be based on an assumption that the reporting unit could be bought or sold in a nontaxable

transaction or a taxable transaction.” Schedule 4.9 summarizes the nontaxable versus taxable assumption when measuring the fair value of the East Reporting Unit.

Illustration of Applying the Guideline Public Company Method to Measure the Fair Value of a Reporting Unit

4.88 This section illustrates a valuation analysis performed to measure fair value of a reporting unit under the guideline public company method. (See paragraphs 4.44–.72 for discussion of some of the considerations in applying the guideline public company method.) Reference is made to the following schedules:

- *Schedule 4.10—Market Approach: Guideline Public Company Method.* This schedule presents the application of selected guideline company market multiples to the subject reporting unit’s financial metrics. The multiples are weighted, and cash and nonoperating assets are added to arrive at an indicated fair value for this method on a marketable, noncontrolling basis.
- *Schedule 4.10.1—Market Approach: Guideline Public Company Method—Analysis of Guideline Group.* This schedule presents market multiple calculations for each identified guideline company. The schedule shows the high, mean, median, and low multiples for each dataset, which consists of both historical and forward looking multiples. Selected multiples for each data set are also shown.
- *Schedule 4.10.2—Market Approach: Guideline Public Company Method—Metrics Analysis.* This schedule presents a comparison of financial data for each guideline company to the subject reporting unit. Measures of size, profitability, and growth are included.

Illustration of Applying the Guideline Company Transactions Method to Measure the Fair Value of a Reporting Unit

4.89 This section illustrates a valuation analysis performed to measure fair value of a reporting unit under the guideline company transactions method. (See paragraphs 4.73–.78 for discussion of some of the considerations in applying the guideline company transactions method.) Reference is made to the following schedules:

- *Schedule 4.11—Market Approach: Guideline Company Transactions Method—Indication of Value.* This schedule presents the application of selected guideline company transaction market multiples to the subject reporting unit’s financial metrics. The multiples are weighted, and cash and nonoperating assets are added to arrive at an indicated fair value for this method on a marketable, control basis.
- *Schedule 4.11.1—Market Approach: Guideline Company Transactions Method—Transaction Data.* This schedule presents market multiple calculations for each identified guideline company transaction. The schedule shows high, mean, median, and low multiples for each dataset. Selected multiples for each data set are also shown, as are control premiums for each transaction in which such information was disclosed.

Comparison of Measured Fair Value of Reporting Unit to Carrying Amount

4.90 Reference is made to the following schedule:

- *Schedule 4.12—Summary of Step 1 Goodwill Impairment Test—East Reporting Unit, Fair Value of Reporting Unit.* This schedule summarizes the results of measuring the fair value of the East Reporting Unit using the DCF method, the guideline public company method, and the guideline company transactions method. As discussed in paragraph 4.17, when measuring the fair value of a subject reporting unit, multiple valuation techniques are often used. FASB ASC 820-10-35-24B provides that “[i]f multiple valuation techniques are used to measure fair value, the results (that is, respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results.”

Comparison of Fair Value Measurements to External Fair Value Indications

4.91 See paragraphs 4.79–.83 for a discussion regarding comparison of fair value measurements to external fair value indications. Reference is made to the following schedules:

- *Schedule 4.13—Comparison to Market Capitalization—Consolidated.* This schedule illustrates the comparison of the measured fair value of the subject reporting units of the ABC Company with the market capitalization of the ABC Company.
- *Schedule 4.13.1—Fair Value of Corporate Net Assets.* This schedule illustrates calculation of the corporate entity’s fair value, which is utilized in schedule 4.13 to arrive at the implied control premium. See paragraph 4.82 for a discussion of control premium.
- *Schedule 4.14—Comparison to Market Capitalization—Reconciling Items.* This schedule is a continuation of schedule 4.13 and identifies components that explain some of the difference between aggregate fair value used in impairment testing with the observable capitalization of the company. See paragraph 4.83 for a discussion of reconciling items.

Step 2 of Goodwill Impairment Test

4.92 As discussed in chapter 2, “Accounting Considerations When Testing Goodwill for Impairment,” when performing step 2 of the goodwill impairment test, an entity needs to consider and consistently apply any assumptions developed in step 1. Paragraph 2.62 specifically discusses assumptions about whether a reporting unit could be bought or sold in a taxable versus a nontaxable transaction. This comprehensive example provides two illustrations of step 2 of the goodwill impairment test; the first assumes a taxable transaction, the second assumes a nontaxable transaction. Only one step 2–related calculation is required by GAAP, which should be consistent with the conclusions reached in step 1 of the goodwill impairment test (see schedule 4.9).

4.93 Reference is made to the following schedules:

- *Schedule 4.15—Second Step of the Goodwill Impairment Test—Taxable Transaction.* This schedule presents the application of step

2 of the goodwill impairment test, assuming a taxable transaction. This step is used to measure the amount of impairment loss (if any) by comparing the implied fair value of reporting unit goodwill with the carrying amount of that goodwill.

- *Schedule 4.16—Second Step of the Goodwill Impairment Test—Nontaxable Transaction.* This schedule presents the application of step 2 of the goodwill impairment test, assuming a nontaxable transaction. This step is used to measure the amount of impairment loss (if any) by comparing the implied fair value of reporting unit goodwill with the carrying amount of that goodwill.

Schedules

4.94

Schedule 4.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Consolidating Balance Sheet and Carrying Amount Calculation as of the
 Measurement Date (US \$)

	West Reporting Unit	East Reporting Unit	Corporate	Consolidated
Assets				
Cash and Cash Equivalents	\$600,000	\$3,000,000	\$2,400,000	\$6,000,000
Accounts Receivable, Net	6,600,000	9,900,000	—	16,500,000
Inventories	1,000,000	1,500,000	—	2,500,000
Inter-Company Due To or From (1)	—	(3,000,000)	3,000,000	—
Prepaid Expenses and Other	100,000	150,000	—	250,000
Total Current Assets	<u>8,300,000</u>	<u>11,550,000</u>	<u>5,400,000</u>	<u>25,250,000</u>
Property, Plant, and Equipment				
Gross Property, Plant, and Equipment	5,300,000	13,250,000	7,950,000	26,500,000
Less: Accumulated Depreciation	<u>(353,333)</u>	<u>(883,333)</u>	<u>(530,000)</u>	<u>(1,766,667)</u>
Net Property, Plant, and Equipment	<u>4,946,667</u>	<u>12,366,667</u>	<u>7,420,000</u>	<u>24,733,333</u>

(continued)

Testing Goodwill for Impairment

	West Reporting Unit	East Reporting Unit	Corporate	Consolidated
Intangible Assets, Net of Amortization				
Covenants Not to Compete	2,250,000	2,250,000	—	4,500,000
Trade Secrets	—	6,000,000	—	6,000,000
Company Trade Name	—	—	13,500,000	13,500,000
Product Trade Name	—	6,000,000	—	6,000,000
Favorable Leases	1,640,000	4,920,000	1,640,000	8,200,000
Customer Relationships	7,200,000	10,800,000	—	18,000,000
Goodwill	26,000,000	39,000,000	—	65,000,000
Accumulated Amortization	<u>(1,366,286)</u>	<u>(2,753,000)</u>	<u>(784,333)</u>	<u>(4,903,619)</u>
Total Net Intangible Assets and Goodwill	<u>35,723,714</u>	<u>66,217,000</u>	<u>14,355,667</u>	<u>116,296,381</u>
Other Assets				
Equity Method Investments	—	6,000,000	—	6,000,000
Total Other Assets	—	6,000,000	—	6,000,000
Total Assets	<u>\$48,970,381</u>	<u>\$96,133,667</u>	<u>\$27,175,667</u>	<u>\$172,279,714</u>
Liabilities and Equity				
Current				
Installments of Long-Term Debt	—	—	5,000,000	5,000,000
Accounts Payable	3,850,000	6,600,000	550,000	11,000,000
Accrued Salaries and Wages	700,000	1,200,000	100,000	2,000,000
Total Current Liabilities	<u>4,550,000</u>	<u>7,800,000</u>	<u>5,650,000</u>	<u>18,000,000</u>
Long-Term Liabilities				
Unfavorable Lease Liability	2,500,000	—	—	2,500,000
Deferred Tax Liability	2,000,000	8,000,000	—	10,000,000
Long-Term Debt, Noncurrent	—	—	45,000,000	45,000,000

	West Reporting Unit	East Reporting Unit	Corporate	Consolidated
Total Long-Term Liabilities	4,500,000	8,000,000	45,000,000	57,500,000
Total Liabilities	<u>9,050,000</u>	<u>15,800,000</u>	<u>50,650,000</u>	<u>75,500,000</u>
Equity				
Shareholder's Equity	39,920,381	70,333,667	(23,474,333)	86,779,714
Noncontrolling Interest (2)	—	10,000,000	—	10,000,000
Total Equity	<u>39,920,381</u>	<u>80,333,667</u>	<u>(23,474,333)</u>	<u>96,779,714</u>
Total Liabilities and Equity	<u>\$48,970,381</u>	<u>\$96,133,667</u>	<u>\$27,175,667</u>	<u>\$172,279,714</u>

(1) Treatment of intercompany accounts depends on facts and circumstances. For purposes of this example, intercompany accounts are not considered to be a component of net working capital.

(2) Represents noncontrolling interest of the East Reporting Unit.

Schedule 4.2

ABC Company
 FASB ASC 350 Example—GAAP Basis—Assessing the Forecast
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Prospective Financial Information, As Provided by Management

	PY	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<i>% Revenue Growth Rate</i>		10.0%	8.0%	6.0%	4.0%	4.0%	3.0%
Net Revenue	\$60,450,000	\$66,495,000	\$71,814,600	\$76,123,476	\$79,168,415	\$82,335,152	\$84,805,206
Net Revenue—Future Acquisition		\$—	\$—	\$3,200,000	\$5,000,000	\$6,000,000	\$6,500,000
Total Revenue	\$60,450,000	\$66,495,000	\$71,814,600	\$79,323,476	\$84,168,415	\$88,335,152	\$91,305,206
Cost of Goods Sold (Excluding Depreciation and Amortization)		(37,237,200)	(35,907,300)	(38,868,503)	(42,925,892)	(45,050,927)	(46,565,655)
Gross Profit		29,257,800	35,907,300	40,454,973	41,242,523	43,284,224	44,739,551
<i>Gross Profit Margin</i>		44.0%	50.0%	51.0%	49.0%	49.0%	49.0%
Operating Expenses (Excluding Depreciation and Amortization):							
General and Administrative		5,319,600	5,745,168	6,345,878	6,312,631	6,625,136	6,847,890
Selling		6,649,500	7,181,460	7,932,348	7,995,999	8,391,839	8,673,995
Share-Based Compensation		1,329,900	1,436,292	2,379,704	2,525,052	2,650,055	2,739,156
Other Expense		3,324,750	3,590,730	3,966,174	4,208,421	4,416,758	4,565,260
Total Operating Expenses	16,623,750	17,953,650	20,624,104	20,624,104	21,042,104	22,083,788	22,826,302
<i>Operating Expense Margin</i>		25.0%	25.0%	26.0%	25.0%	25.0%	25.0%

Testing Goodwill for Impairment

PY	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	\$12,634,050	\$17,953,650	\$19,830,869	\$20,200,420	\$21,200,436	\$21,913,249
<i>EBITDA Margin</i>	19.0%	25.0%	25.0%	24.0%	24.0%	24.0%
Depreciation (GAAP Carryover Basis—Including Acquisition Spend)	1,026,190	1,197,619	2,069,048	2,140,476	2,354,762	2,569,048
Amortization (GAAP Carryover Basis)	2,752,857	2,752,857	2,752,857	2,752,857	2,302,857	2,302,857
Earnings Before Interest and Taxes (EBIT)	\$8,855,002	\$14,003,174	\$15,008,964	\$15,307,086	\$16,542,817	\$17,041,345
<i>EBIT Margin</i>	13.3%	19.5%	18.9%	18.2%	18.7%	18.7%
Income Taxes	(3,413,958)	(5,398,784)	(5,786,556)	(5,901,494)	(6,377,918)	(6,570,120)
<i>Income Tax Rate</i>	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%
Debt-Free Net Income	\$5,441,045	\$8,604,390	\$9,222,408	\$9,405,592	\$10,164,900	\$10,471,225
Cash Flow Adjustments						
Depreciation and Amortization	3,779,048	3,950,476	4,821,905	4,893,333	4,657,619	4,871,905
Noncash Share-Based Compensation	1,329,900	1,436,292	2,379,704	2,525,052	2,650,055	2,739,156
Capital Expenditures	(1,000,000)	(1,200,000)	(1,100,000)	(500,000)	(1,500,000)	(1,500,000)
Acquisition Spend	—	—	(5,000,000)	—	—	—
Net Change in Noncash Working Capital (1)	5.0%	(302,250)	(375,444)	(242,247)	(208,337)	(148,503)
Debt-Free Cash Flow	\$9,247,742	\$12,525,178	\$9,948,573	\$16,081,731	\$15,764,236	\$16,433,783

(1) Represents normalized debt-free, cash-free net working capital as a percentage of revenue.

Schedule 4.2.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Prospective Financial Information—Capital Expenditures, Depreciation (Including Acquisition Spend Impact) and Amortization
 (GAAP Basis)

Depreciation	Testing Goodwill for Impairment					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fixed Asset Depreciable Basis						
Estimated Remaining Economic Useful Life						
	\$13,250,000					
Annual Depreciation on Existing Assets Capital Expenditures						
Forecast Capital Expenditures	\$883,333	\$883,333	\$883,333	\$883,333	\$883,333	\$883,333
Acquisition Capital Expenditures	\$1,000,000	\$1,200,000	\$1,100,000	\$500,000	\$1,500,000	\$1,500,000
	\$—	\$—	\$5,000,000	\$—	\$—	\$—
	100.0%	14.3%	14.3%	14.3%	14.3%	14.3%
	7.0					
Annual Depreciation Related to New Assets						
Year 1	\$1,000,000	142,857	142,857	142,857	142,857	142,857

Depreciation		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 2	\$1,200,000		171,429	171,429	171,429	171,429	171,429
Year 3	\$6,100,000			871,429	871,429	871,429	871,429
Year 4	\$500,000				71,429	71,429	71,429
Year 5	\$1,500,000					214,286	214,286
Year 6	\$1,500,000						214,286
Incremental Depreciation Related to New Assets		142,857	314,286	1,185,714	1,257,143	1,471,429	1,685,714
Total Depreciation for All Assets		1,026,190	1,197,619	2,069,048	2,140,476	2,354,762	2,569,048

Amortization		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Intangible Assets—East Reporting Unit	Original Cost Basis						
	Useful Life						
		450,000	450,000	450,000	450,000	400,000	400,000
Covenants Not to Compete	2,250,000	450,000	450,000	450,000	400,000	300,000	300,000
Trade Secrets	6,000,000	400,000	400,000	400,000	400,000	300,000	300,000
Product Trade Name	6,000,000	300,000	300,000	300,000	300,000	300,000	300,000

(continued)

Amortization

	Original Cost Basis	Useful Life	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			702,857	702,857	702,857	702,857	702,857	702,857
Favorable Leases	4,920,000	7.00	702,857	702,857	702,857	702,857	702,857	702,857
Customer Relationships	10,800,000	12.00	900,000	900,000	900,000	900,000	900,000	900,000
Goodwill	39,000,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Schedule 4.2.2

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Prospective Financial Information—Capital Expenditures and Depreciation (Excluding Acquisition Spend Impact) (GAAP Basis)

Depreciation

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	\$883,333	\$883,333	\$883,333	\$883,333	\$883,333	\$883,333
Fixed Asset Depreciable Basis						
Estimated Remaining Economic Useful Life						
Annual Depreciation on Existing Assets						

\$13,250,000

15.0

Depreciation

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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Capital Expenditures

Forecast Capital Expenditures	\$1,000,000	\$1,200,000	\$1,100,000	\$500,000	\$1,500,000	\$1,500,000
Acquisition Capital Expenditures	\$—	\$—	\$—	\$—	\$—	\$—

Measuring Fair Value of a Reporting Unit

Weight	Useful Life
100.0%	7.0

Annual Depreciation Related to New Assets

Year 1	\$1,000,000	142,857	142,857	142,857	142,857	142,857
Year 2	\$1,200,000	171,429	171,429	171,429	171,429	171,429
Year 3	\$1,100,000	157,143	157,143	157,143	157,143	157,143
Year 4	\$500,000	71,429	71,429	71,429	71,429	71,429
Year 5	\$1,500,000	214,286	214,286	214,286	214,286	214,286
Year 6	\$1,500,000	214,286	214,286	214,286	214,286	214,286

Incremental Depreciation Related to New Assets

Incremental Depreciation Related to New Assets	142,857	314,286	471,429	542,857	757,143	971,429
Total Depreciation for All Assets	1,026,190	1,197,619	1,354,762	1,426,190	1,640,476	1,854,762

Schedule 4.3

ABC Company
 FASB ASC 350 Example—Assessing the Forecast
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Strategic Plan, Prospective Financial Information, Adjustments Reflecting Market Participant Assumptions

REFERENCE

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Net Revenue—Organic Business	\$—	\$—	\$—	\$—	\$—	\$—
Net Revenue—Acquisition Spend (1)	—	—	\$(3,200,000)	\$(5,000,000)	\$(6,000,000)	\$(6,500,000)
Total Revenue	\$—	\$—	\$(3,200,000)	\$(5,000,000)	\$(6,000,000)	\$(6,500,000)
Cost of Goods Sold	—	—	1,568,000	2,550,000	3,240,000	3,315,000
Gross Profit	—	—	(1,632,000)	(2,450,000)	(2,760,000)	(3,185,000)
<i>Gross Profit Margin</i>	N/A	N/A	51.0%	49.0%	46.0%	49.0%
Operating Expenses (Excluding Depreciation and Amortization):						
General and Administrative	—	—	(128,000)	(187,500)	(225,000)	(243,750)
Selling	—	—	(160,000)	(237,500)	(285,000)	(308,750)
Share-Based Compensation	—	—	—	—	—	—
Royalty for Use of Corporate Tradename	1,662,375	1,795,365	1,903,087	1,979,210	2,058,379	2,120,130
Other Expense	—	—	(80,000)	(125,000)	(120,000)	(130,000)
Total Operating Expenses	1,662,375	1,795,365	1,535,087	1,429,210	1,428,379	1,437,630

REFERENCE

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<i>Operating Expense Margin</i>						
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	\$ (1,662,375)	\$ (1,795,365)	\$ (3,167,087)	\$ (3,879,210)	\$ (4,188,379)	\$ (4,622,630)
<i>EBITDA Margin</i>						
Depreciation (GAAP Carryover Basis—Including Acquisition Spend)	(5)	—	(714,286)	(714,286)	(714,286)	(714,286)
Earnings Before Interest and Taxes (EBIT)	\$ (1,662,375)	\$ (1,795,365)	\$ (2,452,801)	\$ (3,164,925)	\$ (3,474,093)	\$ (3,908,344)
Cash Flow Adjustments:						
Depreciation	(5)	—	(714,286)	(714,286)	(714,286)	(714,286)
Noncash Share-Based Compensation	(6)	(1,436,292)	(2,379,704)	(2,525,052)	(2,650,055)	(2,739,156)
Capital Expenditures						
Capital Expenditures—Acquisition Spend	(7)	—	5,000,000	—	—	—
Net Change in Noncash Working Capital 5.0%	(8)	—	160,000	90,000	50,000	25,000

(continued)

- (1) For purposes of impairment testing, management has indicated that the acquisition spend is a strategic choice and is a business combination per Financial Accounting Standards Board *Accounting Standards Codification* 805, *Business Combinations*. As none of the assets associated with these investments is reflected on the balance sheet (and carrying amount) as of the test date, the inclusion of the benefits associated with this investment would potentially overstate the fair value of the reporting unit. Therefore, this investment is not reflected in the data used to populate valuation models for impairment testing.
- (2) To remove cost of goods sold associated with acquisition related revenue.
- (3) Based on an analysis of detailed ledgers, approximately 50 percent of selling, administrative, and other costs are fixed in nature. This adjustment removes the variable component of the costs associated with the acquisition spend (see note [1]). Share-based compensation relates to the organic business and therefore not adjusted as an expense item.
- (4) To reflect a charge for the entity trade name that is utilized in selling the reporting unit goods. Because the trade name is not allocated to the reporting unit carrying amount, a charge for the use of the trade name was applied to provide for a consistent application of fair value to carrying amount.
- (5) To eliminate depreciation associated with acquisition related capital expenditures.
- (6) Assumed that share-based compensation issued is in lieu of cash payments to employees. As such, this amount is not added to arrive at debt-free cash flows.
- (7) To adjust the capital expenditures associated with acquisition spend removed from the analysis in note (1).
- (8) Represents reversal of net working capital investment associated with revenue adjustment in note (1).

Schedule 4.4

ABC Company
 FASB ASC 350 Example—Assessing the Forecast
 Fair Value of Fair Value of Equity (Net Assets)—East Reporting Unit
 Adjusted Prospective Financial Information

	PY	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Total Revenue	\$60,450,000	\$66,495,000	\$71,814,600	\$76,123,476	\$79,168,415	\$82,335,152	\$84,805,206
Cost of Goods Sold	(33,852,000)	(37,237,200)	(35,907,300)	(37,300,503)	(40,375,892)	(41,810,927)	(43,250,655)
Gross Profit	26,598,000	29,257,800	35,907,300	38,822,973	38,792,523	40,524,224	41,554,551
<i>Gross Profit Margin</i>	44.0%	44.0%	50.0%	51.0%	49.0%	49.2%	49.0%
Operating Expenses (Excluding Depreciation and Amortization)							
General and Administrative	5,053,620	5,319,600	5,745,168	6,217,878	6,125,131	6,400,136	6,604,140
Selling	6,317,025	6,649,500	7,181,460	7,772,348	7,758,499	8,106,839	8,365,245
Share-Based Compensation	1,263,405	1,329,900	1,436,292	2,379,704	2,525,052	2,650,055	2,739,156
Royalty for Use of Corporate Tradename	1,511,250	1,662,375	1,795,365	1,903,087	1,979,210	2,058,379	2,120,130
Other Expense	3,158,513	3,324,750	3,590,730	3,886,174	4,083,421	4,296,758	4,435,260
Total Operating Expenses	17,303,813	18,286,125	19,749,015	22,159,191	22,471,314	23,512,167	24,263,932
<i>Operating Expense Margin</i>	28.6%	27.5%	27.5%	29.1%	28.4%	28.6%	28.6%

(continued)

Testing Goodwill for Impairment

	PY	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	\$9,294,188	\$10,971,675	\$16,158,285	\$16,663,782	\$16,321,209	\$17,012,058	\$17,290,619
<i>EBITDA Margin</i>	15.4%	16.5%	22.5%	21.9%	20.6%	20.7%	20.4%
Depreciation (Carryover Book Basis)	1,026,190	1,197,619	1,354,762	1,354,762	1,426,190	1,640,476	1,854,762
Amortization (Carryover Book Basis)	2,752,857	2,752,857	2,752,857	2,752,857	2,752,857	2,302,857	2,302,857
Earnings Before Interest and Taxes (EBIT)	\$7,192,627	\$12,207,809	\$12,556,163	\$12,556,163	\$12,142,162	\$13,068,724	\$13,133,000
<i>EBIT Margin</i>	10.8%	17.0%	16.5%	16.5%	15.3%	15.9%	15.5%
Income Taxes	(2,773,046)	(4,706,599)	(4,840,903)	(4,840,903)	(4,681,289)	(5,038,516)	(5,063,297)
<i>Income Tax Rate</i>	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%
Debt-Free Net Income	\$4,419,582	\$7,501,210	\$7,715,260	\$7,715,260	\$7,460,873	\$8,030,208	\$8,069,703
Cash Flow Adjustments							
Depreciation	3,779,048	3,950,476	4,107,619	4,107,619	4,179,048	3,943,333	4,157,619
Noncash Share-Based Compensation	—	—	—	—	—	—	—
Capital Expenditures	(1,000,000)	(1,200,000)	(1,100,000)	(1,100,000)	(500,000)	(1,500,000)	(1,500,000)
Capital Expenditures—Acquisition Spend	—	—	—	—	—	—	—
Net Change in Noncash Working Capital	5.0%	(302,250)	(265,980)	(215,444)	(152,247)	(158,337)	(123,503)
Debt-Free Cash Flow	\$6,896,379	\$9,985,706	\$10,507,435	\$10,507,435	\$10,987,673	\$10,315,205	\$10,603,820

Schedule 4.5

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Business Enterprise Valuation: Income Approach—Discounted Debt-Free Cash Flow Method

Nontaxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
<i>% Revenue Growth Rate</i>	N/A	8.0%	6.0%	4.0%	4.0%	3.0%	2.0%
Net Revenue	\$66,495,000	\$71,814,600	\$76,123,476	\$79,168,415	\$82,335,152	\$84,805,206	\$86,501,310
Cost of Goods Sold (Excluding Depreciation and Amortization)	(37,237,200)	(35,907,300)	(37,300,503)	(40,375,892)	(41,810,927)	(43,250,655)	(44,115,668)
Gross Profit	29,257,800	35,907,300	38,822,973	38,792,523	40,524,224	41,554,551	42,385,642
<i>Gross Profit Margin</i>	44.0%	50.0%	51.0%	49.0%	49.2%	49.0%	49.0%
Operating Expenses (Excluding Depreciation and Amortization)							
General and Administrative	5,319,600	5,745,168	6,217,878	6,125,131	6,400,136	6,604,140	6,736,223
Selling	6,649,500	7,181,460	7,772,348	7,758,499	8,106,839	8,365,245	8,532,549
Share-Based Compensation	1,329,900	1,436,292	2,379,704	2,525,052	2,650,055	2,739,156	2,793,939

(continued)

Testing Goodwill for Impairment

Nontaxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Royalty for Use of Corporate Tradename	1,662,375	1,795,365	1,903,087	1,979,210	2,058,379	2,120,130	2,162,533
Other Expense	3,324,750	3,590,730	3,886,174	4,083,421	4,296,758	4,435,260	4,523,966
Total Operating Expenses	18,286,125	19,749,015	22,159,191	22,471,314	23,512,167	24,263,932	24,749,210
<i>Operating Expense Margin</i>	27.5%	27.5%	29.1%	28.4%	28.6%	28.6%	28.6%
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	\$10,971,675	\$16,158,285	\$16,663,782	\$16,321,209	\$17,012,058	\$17,290,619	\$17,636,432
<i>EBITDA Margin</i>	16.5%	22.5%	21.9%	20.6%	20.7%	20.4%	20.4%
Depreciation (Carryover Tax Basis)	1,401,650	1,549,255	1,646,220	1,593,845	1,593,845	1,784,650	1,820,343
Amortization (Carryover Tax Basis)	4,598,000	4,598,000	4,598,000	4,598,000	4,598,000	4,598,000	—
Earnings Before Interest and Taxes (EBIT)	\$4,972,025	\$10,011,030	\$10,419,562	\$10,129,364	\$10,820,213	\$10,907,969	\$15,816,089
<i>EBIT Margin</i>	7.5%	13.9%	13.7%	12.8%	13.1%	12.9%	18.3%
Income Taxes	(1,916,915)	(3,859,653)	(4,017,158)	(3,905,275)	(4,171,625)	(4,205,458)	(6,097,735)
<i>Income Tax Rate</i>	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%
Debt-Free Net Income	\$3,055,110	\$6,151,377	\$6,402,404	\$6,224,089	\$6,648,588	\$6,702,511	\$9,718,354

Nontaxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Cash Flow Adjustments							
Depreciation and Amortization (Reflects Carryover Tax Basis)							
(1)	5,999,650	6,147,255	6,244,220	6,191,845	6,191,845	6,382,650	1,820,343
Capital Expenditures	(1,000,000)	(1,200,000)	(1,100,000)	(500,000)	(1,500,000)	(1,500,000)	(1,820,343)
Net Change in Noncash Working Capital 5.0%	(302,250)	(265,980)	(215,444)	(152,247)	(158,337)	(123,503)	(84,805)
Debt-Free Cash Flow	\$7,752,510	\$10,832,652	\$11,331,180	\$11,763,687	\$11,182,096	\$11,461,658	\$9,633,549
Discount Period	0.50	1.50	2.50	3.50	4.50	5.50	
Present Value Factor 14.5%	0.9345	0.8162	0.7128	0.6226	0.5437	0.4749	
Present Value of Debt-Free Cash Flows	\$7,245,021	\$8,841,513	\$8,077,211	\$7,323,594	\$6,079,929	\$5,442,736	
Sum of the Present Value of Discrete Year Cash Flows	\$43,010,004						2.0%
Present Value of Terminal Cash Flow	36,597,052						\$77,068,389
Indicated Enterprise Value from Operations	\$79,607,056						0.4749

(continued)

Nontaxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Add: Cash and Cash Equivalents	3,000,000						
Add: Equity Method Investments (1)	6,000,000						
Add: Present Value of Cost Savings	18,300,000						
Add: Present Value of Amortization Beyond Discrete Period	<u>3,840,355</u>						
Indicated Enterprise Value—Control, Marketable Basis	<u>\$110,750,000</u>						
Less: Fair Value of Debt (2)	<u>\$—</u>						
Fair Value of Equity (Net Assets)—East Unit	<u>\$110,750,000</u>						
				Present Value of Terminal Cash Flow			<u>\$36,597,052</u>

(1) Cash flows do not reflect incremental benefit related to this asset. Assume net book value is approximation for fair value.

(2) For purposes of this example, no debt is allocated to this reporting unit.

Schedule 4.5.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Nontaxable Model—Carryover Tax Basis Depreciation and Amortization

		Measuring Fair Value of a Reporting Unit					
Depreciation		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fixed Asset Depreciable Book Original Cost Basis	\$13,250,000						
Estimated Remaining Economic Useful Life	15.0	9.5%	8.6%	7.7%	6.9%	6.2%	5.9%
Annual Depreciation on Existing Assets		\$1,258,750	\$1,132,875	\$1,020,250	\$918,225	\$825,475	\$781,750
Capital Expenditures							
Forecast Capital Expenditures		\$1,000,000	\$1,200,000	\$1,100,000	\$500,000	\$1,500,000	\$1,500,000
Acquisition Capital Expenditures		\$—	\$—	\$—	\$—	\$—	\$—
	Weight	100.0%	14.3%	24.5%	12.5%	8.9%	8.9%
	Useful Life	7.0					

(continued)

Testing Goodwill for Impairment

Depreciation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
	Annual Depreciation Related to New Assets							
Year 1	\$1,000,000	244,900	174,900	124,900	89,300	89,200		
Year 2	\$1,200,000	171,480	293,880	209,880	149,880	107,160		
Year 3	\$1,100,000		157,190	269,390	192,390	137,390		
Year 4	\$500,000			71,450	122,450	87,450		
Year 5	\$1,500,000				214,350	367,350		
Year 6	\$1,500,000					214,350		
Incremental Depreciation Related to New Assets	142,900	416,380	625,970	675,620	768,370	1,002,900		
Total Depreciation for All Assets	1,401,650	1,549,255	1,646,220	1,593,845	1,593,845	1,784,650		
Amortization								
	Original Cost Basis	Tax Useful Life	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Intangible Assets								
Covenants Not to Compete	2,250,000	15.00	150,000	150,000	150,000	150,000	150,000	150,000
Trade Secrets	6,000,000	15.00	400,000	400,000	400,000	400,000	400,000	400,000

Amortization

	Original Cost Basis	Tax Useful Life	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Product Trade Name	6,000,000	15.00	400,000	400,000	400,000	400,000	400,000	400,000
Favorable Leases	4,920,000	15.00	328,000	328,000	328,000	328,000	328,000	328,000
Customer Relationships	10,800,000	15.00	720,000	720,000	720,000	720,000	720,000	720,000
Goodwill	39,000,000	15.00	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000
			4,598,000	4,598,000	4,598,000	4,598,000	4,598,000	4,598,000

Schedule 4.6

ABC Company
 FASB ASC 350 Example
 Weighted Average Cost of Capital Calculation
 Valuation Date: Measurement Date

A. Market-Based Capital**Structure (1)**

Equity	70.0%
--------	-------

Debt	30.0%
------	-------

B. Cost of**Equity**

rf = Risk-free rate = U.S. Treasury 30-year bond yield as of the measurement date

= 3.5%

β = Relevered Beta = a measure of the systematic risk or individual price volatility relative to the market

= 1.8 (see schedule 4.6.1)

rm = Market risk premium (MRP) = incremental return demanded by an average equity investor in Standard & Poor's (S&P) 500 stocks

= 6.0%

P = Size premium = additional risk that is unique to small companies

= 3.9%

A = Alpha = entity-specific risk premium that is not sufficiently captured by market risk premium, beta, and size premium

= 1.0%

Cost of Equity = 3.5% + (1.8 × 6%) + 3.9% + 1.0% = 19% (rounded)

C. Cost of Debt

Cost of Debt =	5.7%	(2)
----------------	------	-----

Income Tax Rate = 38.6%

After Tax Cost of

Debt	3.5%	= (5.7% * (1 - 38.6%))
------	------	------------------------

D. Weighted Average Cost of Capital

	Estimated Cost		Percentage of Total Capital		Weighted Contribution
Cost of Equity	19.0%	×	70%	=	13.3%
After Tax Cost of Debt	3.5%	×	30%	=	1.1%

Estimated Weighted Average Cost of Capital—

Rounded	=	14.5%
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(1) Based on a peer group of market participants (see schedule 4.6.1).

(2) Based on the Moody's yield of corporate bonds of market participants as of the measurement date. Moody's tries to include bonds with remaining maturities as close as possible to 30 years.

Schedule 4.6.1

ABC Company
 FASB ASC 350 Example
 Weighted Average Cost of Capital Calculation—Select Market Data
 As of Measurement Date (\$ millions)

Company Name	(A)	(B)	(A)+(B)	Market-Based Capital Structure (Expressed as a % of BEV)		Income Tax Rate	5-Year Monthly Asset Beta S&P 500 (1)	5-Year Monthly Equity Beta Unlevered	Working Capital / Sales Ratio (2)	
	Market Value of Equity (\$ millions)	Interest-Bearing Debt, Net of Cash (DEBT) (\$ millions)	Total Interest-Bearing Debt, Net of Cash (DEBT) (\$ millions)	Business Enterprise Value (BEV) (\$ millions)	EQUITY					DEBT
Guideline Co. 1	\$3,485.0	\$779.0	\$4,264.0	81.7%	18.3%	35.0%	2.3	2.01	5%	
Guideline Co. 2	\$651.0	\$279.0	\$930.0	70.0%	30.0%	38.6%	2.0	1.58	10%	
Guideline Co. 3	\$4,706.8	\$242.0	\$4,948.8	95.1%	4.9%	38.6%	2.3	2.23	8%	
Guideline Co. 4	\$225.0	\$177.0	\$402.0	56.0%	44.0%	38.6%	1.4	0.94	11%	
Guideline Co. 5	\$1,668.0	\$957.0	\$2,625.0	63.5%	36.5%	38.6%	2.4	1.77	5%	
Guideline Co. 6	\$532.0	\$254.0	\$786.0	67.7%	32.3%	38.6%	0.8	0.62	4%	
Guideline Co. 7	\$856.8	\$328.0	\$1,184.80	72.3%	27.7%	38.6%	1.8	1.46	6%	
Guideline Co. 8	\$526.6	\$2.5	\$529.2	99.5%	0.5%	38.6%	1.4	1.40	5%	
Guideline Co. 9	\$230.4	\$194.0	\$424.4	54.3%	45.7%	38.6%	1.4	0.92	5%	

(continued)

Company Name	(A)	(B)	(A)+(B)	Market-Based Capital Structure (Expressed as a % of BEV)		5-Year Monthly Asset Beta S&P 500 (1)	5-Year Monthly Equity Beta Unlevered	Working Capital / Sales Ratio (2)
	Market Value of Equity (\$ millions)	Total Interest-Bearing Debt, Net of Cash (DEBT) (\$ millions)	Business Enterprise Value (BEV) (\$ millions)	EQUITY	DEBT			
						Income Tax Rate		
Hi				99.5%	45.7%	2.40	2.23	11%
Low				54.3%	0.5%	0.80	0.62	4%
Median				70.0%	30.0%	1.80	1.46	5%
Average				73.3%	26.7%	1.76	1.44	7%
Selected				70.0%	30.0%		1.4	5%
Relevered Equity Beta (βe) (3)							1.8	

Source: Data provided by Capital IQ and Bloomberg.

- (1) Based on raw equity beta.
- (2) Forecast increase or decrease in net working capital is cash free.
- (3) $\beta_e = \beta_a * (1 + (Wd/We) * (1 - T))$, when
 - β_e = Relevered Equity Beta
 - β_a = Asset Beta
 - Wd = % of capital structure financed by debt capital
 - We = % of capital structure financed by equity capital
 - T = Income Tax rate

Schedule 4.7

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—Taxable Transaction—East Reporting Unit
 Business Enterprise Valuation: Income Approach—Discounted Debt-Free Cash Flow Method

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
<i>% Revenue Growth Rate</i>	N/A	8.0%	6.0%	4.0%	4.0%	3.0%	2.0%
Net Revenue	\$66,495,000	\$71,814,600	\$76,123,476	\$79,168,415	\$82,335,152	\$84,805,206	\$86,501,310
Cost of Goods Sold (Excluding Depreciation and Amortization)	(37,237,200)	(35,907,300)	(37,300,503)	(40,375,892)	(41,810,927)	(43,250,655)	(44,115,668)
Gross Profit	29,257,800	35,907,300	38,822,973	38,792,523	40,524,224	41,554,551	42,385,642
<i>Gross Profit Margin</i>	44.0%	50.0%	51.0%	49.0%	49.2%	49.0%	49.0%
Operating Expenses (Excluding Depreciation and Amortization)							
General and Administrative	5,319,600	5,745,168	6,217,878	6,125,131	6,400,136	6,604,140	6,736,223

(continued)

Testing Goodwill for Impairment

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Selling	6,649,500	7,181,460	7,772,348	7,758,499	8,106,839	8,365,245	8,532,549
Share-Based Compensation	1,329,900	1,436,292	2,379,704	2,525,052	2,650,055	2,739,156	2,793,939
Royalty for Use of Corporate Tradename	1,662,375	1,795,365	1,903,087	1,979,210	2,058,379	2,120,130	2,162,533
Other Expense	3,324,750	3,590,730	3,886,174	4,083,421	4,296,758	4,435,260	4,523,966
Total Operating Expenses	18,286,125	19,749,015	22,159,191	22,471,314	23,512,167	24,263,932	24,749,210
<i>Operating Expense Margin</i>	27.5%	27.5%	29.1%	28.4%	28.6%	28.6%	28.6%
Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)	\$10,971,675	\$16,158,285	\$16,663,782	\$16,321,209	\$17,012,058	\$17,290,619	\$17,636,432
<i>EBITDA Margin</i>	16.5%	22.5%	21.9%	20.6%	20.7%	20.4%	20.4%
Depreciation (Stepped Up Tax Basis)	1,527,525	1,662,543	1,748,245	1,685,668	1,676,393	1,862,825	1,900,082
Amortization	—	—	—	—	—	—	—

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Earnings Before Interest and Taxes (EBIT)	\$9,444,150	\$14,495,743	\$14,915,537	\$14,635,542	\$15,335,665	\$15,427,794	\$15,736,350
<i>EBIT Margin</i>	<i>14.2%</i>	<i>20.2%</i>	<i>19.6%</i>	<i>18.5%</i>	<i>18.6%</i>	<i>18.2%</i>	<i>18.2%</i>
Income Taxes	(3,641,098)	(5,588,689)	(5,750,536)	(5,642,587)	(5,912,512)	(5,948,032)	(6,066,992)
<i>Income Tax Rate</i>	<i>38.6%</i>	<i>38.6%</i>	<i>38.6%</i>	<i>38.6%</i>	<i>38.6%</i>	<i>38.6%</i>	<i>38.6%</i>
Debt-Free Net Income	\$5,803,052	\$8,907,054	\$9,165,001	\$8,992,955	\$9,423,153	\$9,479,763	\$9,669,358
Cash Flow Adjustments							
Depreciation (Reflects Step Up in Value)	1,527,525	1,662,543	1,748,245	1,685,668	1,676,393	1,862,825	1,900,082
Capital Expenditures	(1,000,000)	(1,200,000)	(1,100,000)	(500,000)	(1,500,000)	(1,500,000)	(1,900,082)
Net Change in Noncash Working Capital 5.0%	(302,250)	(265,980)	(215,444)	(152,247)	(158,337)	(123,503)	(84,805)
Debt-Free Cash Flow	\$6,028,327	\$9,103,616	\$9,597,802	\$10,026,376	\$9,441,208	\$9,719,085	\$9,584,553
Discount Period	0.50	1.50	2.50	3.50	4.50	5.50	

(continued)

Testing Goodwill for Impairment

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Present Value Factor 14.5%	0.9345	0.8162	0.7128	0.6226	0.5437	0.4749	
Present Value of Debt-Free Cash Flows	\$5,633,705	\$7,430,289	\$6,841,606	\$6,242,014	\$5,133,374	\$4,615,250	
Sum of the Present Value of Discrete Year Cash Flows	\$35,896,238						Terminal Growth Rate 2.0%
Present Value of Terminal Cash Flow							Residual Value at Terminal Year \$76,676,420
Indicated Enterprise Value from Operations	\$72,307,158						Present Value Factor 0.4749
Add: Cash and Cash Equivalents	3,000,000						Present Value of Terminal Cash Flow \$36,410,920
Add: Equity Method Investments (1)	6,000,000						
Add: Present Value of Cost Savings	18,300,000						

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Add: Present Value of Section 197 Tax Amortization Benefit	14,700,000						
Indicated Enterprise Value—Control, Marketable Basis	114,300,000						
Less: Fair Value of Debt (2)	\$—						
Fair Value of Equity (Net Assets)—East Reporting Unit	\$114,300,000						

(1) Cash flows do not reflect incremental benefit related to this asset. Assume net book value is approximation for fair value.
 (2) For purposes of this example, no debt is allocated to this reporting unit.

(continued)

Taxable Transaction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Tax Amortization Benefit Calculation:							
Discount Rate Applicable	14.5%						
Income Tax Rate	38.6%						
Amortization Period (Years)	15						
Fair Value Before Tax Amortization Benefit	\$93,607,158						
Less: Tangible Assets	12,366,667						
Less: Net Working Capital	<u>6,750,000</u>						
Amortizable Portion	\$74,490,492						
Section 197 Tax Amortization Benefit	\$14,700,000						

Schedule 4.7.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Taxable Model—Stepped Up Tax Basis Depreciation

Measuring Fair Value of a Reporting Unit						
Depreciation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fixed Asset Depreciable Book Original Cost Basis (1)	\$14,575,000					
Estimated Remaining Economic Useful Life	15.0					
Annual Depreciation on Existing Assets	\$1,384,625	\$1,246,163	\$1,122,275	\$1,010,048	\$908,023	\$859,925
Capital Expenditures						
Forecast Capital Expenditures	\$1,000,000	\$1,200,000	\$1,100,000	\$500,000	\$1,500,000	\$1,500,000
Weight	100.0%	14.3%	17.5%	12.5%	8.9%	8.9%
Useful Life	7.0	24.5%	17.5%	12.5%	8.9%	8.9%
Annual Depreciation Related to New Assets						
Year 1	\$1,000,000	244,900	174,900	124,900	89,300	89,200
Year 2	\$1,200,000	171,480	293,880	209,880	149,880	107,160

(continued)

Depreciation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Year 3	\$1,100,000		157,190	269,390	192,390	137,390
Year 4	\$500,000			71,450	122,450	87,450
Year 5	\$1,500,000				214,350	367,350
Year 6	\$1,500,000					214,350
Incremental Depreciation Related to New Assets	142,900	416,380	625,970	675,620	768,370	1,002,900
Total Depreciation For All Assets	1,527,525	1,662,543	1,748,245	1,685,668	1,676,393	1,862,825

(1) Reflects 10 percent step up from original cost.

Schedule 4.8

ABC Company
 FASB ASC 350 Example
 Fair Value of the Invested Capital
 Income Approach—Market Participant Cost Savings Valuation (US\$ 000s)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Terminal
Estimated Cost Savings if Acquired (1)	\$2,500	\$4,000	\$4,200	\$4,200	\$4,100	\$4,000	\$4,080
Income Taxes	(964)	(1,542)	(1,619)	(1,619)	(1,581)	(1,542)	(1,573)
<i>Income Tax Rate</i>	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%	38.6%
Debt-Free Cash Flow	\$1,536	\$2,458	\$2,581	\$2,581	\$2,519	\$2,458	\$2,507
Partial Period Factor	1.0	1.0	1.0	1.0	1.0	1.0	
Discount Period	0.50	1.50	2.50	3.50	4.50	5.50	
Present Value Factor ^{15.0%}	0.9325	0.8109	0.7051	0.6131	0.5332	0.4636	
Present Value of Debt-Free Cash Flows	\$1,432	\$1,993	\$1,820	\$1,582	\$1,343	\$1,140	
							Terminal Growth Rate
							2.0%
Sum of the Present Value of Discrete Year Cash Flows	\$9,310						Residual Value at Terminal Year
Present Value of Terminal Cash Flow	8,941						Present Value Factor
Present Value of Market Participant Cost Savings	\$18,300						Present Value of Terminal Cash Flow
							\$8,941

(1) Cost savings are assumed to take full effect in Year 2 as the buyer integrates the business and incurs severance and other termination expenses.

Schedule 4.8.1

ABC Company

FASB ASC 350 Example

Weighted Average Cost of Capital Calculation—Market Participant Cost Savings Valuation

Valuation Date: Measurement Date

A. Market-Based Capital

Structure (1)

Equity 70.0%

Debt 30.0%

B. Cost of Equity

 $rf = \text{Risk-free rate} = \text{U.S. Treasury 30-year bond yield as of the measurement date}$

= 3.5%

 $\beta = \text{Relevered Beta} = \text{a measure of the systematic risk or individual price volatility relative to the market}$

= 1.8

 $rm = \text{Market risk premium (MRP)} = \text{incremental return demanded by an average equity investor in Standard \& Poor's (S\&P) 500 stocks}$

= 6.0%

 $P = \text{Size premium} = \text{additional risk that is unique to small companies}$

= 3.9%

 $A = \text{Alpha} = \text{entity-specific risk premium that is not sufficiently captured by market risk premium, beta, and size premium}$

= 2.0%

 $\text{Cost of Equity} = 3.5\% + (1.8 \times 6\%) + 3.9\% + 2.0\% = 19.9\% \text{ (rounded)}$

C. Cost of Debt

 $\text{Cost of Debt} = 5.7\% \quad (2)$
 $\text{Income Tax Rate} = 38.6\%$

After Tax Cost of

 $\text{Debt} \quad 3.5\% = (5.7\% * (1 - 38.6\%))$

D. Weighted Average Cost of Capital

	Estimated Cost		Percentage of Total Capital	=	Weighted Contribution
Cost of Equity	19.9%	×	70%	=	13.9%
Cost of Debt	3.5%	×	30%	=	1.1%

 $\text{Estimated Weighted Average Cost of Capital—Rounded} =$
 $\underline{15.0\%}$

(1) Based on a peer group of market participants.

(2) Based on the Moody's yield of corporate bonds of market participants as of the measurement date. Moody's tries to include bonds with remaining maturities as close as possible to 30 years.

Schedule 4.9

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Analysis of Assumed Transaction Structure (US\$)

Reporting Unit	East Reporting Unit	
	Nontaxable Transaction	Taxable Transaction
Equity (Net Assets) Value (Fair Value of Gross Proceeds)	110,750,000 (1)	114,300,000 (1)
Stock Tax Basis	80,333,667	
Tax Basis of Net Assets		78,488,524 (2)
Taxable Proceeds	30,416,333	35,811,476
Income Tax Rate		38.6% (2)
Income Taxes Arising From Transaction	11,730,000	13,810,000
Economic Value to Seller	99,020,000	100,490,000

Transaction Structure to Be Assumed for FASB ASC 350

TAXABLE (3)

(1) Based on reporting unit's discounted cash flow analysis, schedules 4.5 and 4.7.

(2) Given. When determining this amount in practice, the Impairment Task Force recommends consulting with tax advisers.

(3) Although the illustration in this guide concludes that the East Reporting Unit (ERU) is not impaired, if it was determined that the ERU failed step 1, then step 2 would be performed. See schedule 4.15 for an illustration of a step 2 test assuming a taxable transaction was the basis utilized in deriving the fair value of the ERU in step 1. For illustrative purposes only, schedule 4.16 depicts the step 2 calculation assuming a nontaxable transaction was the basis utilized in deriving the fair value of the ERU in step 1. Note that in practice, the step 2 test is performed only once, consistent with the assumed transaction structure (that is, taxable or nontaxable), in step 1.

Schedule 4.10

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Reporting Unit
 Market Approach: Guideline Public Company Method (US\$)

Valuation Multiples	Weighting (1)	Selected Multiple	Financial Statistic	Preliminary Enterprise Value	Add: Cash and Cash Equivalents	Less: Fair Value of Debt (2)	Add: Equity Method Investments (3)	Cash-Adjusted Equity Value (Minority)
Last 12 Months								
Cash-Adjusted Enterprise Value / EBITDA (4)	40.0%	10.4 ×	\$9,294,188	\$96,659,550	\$3,000,000	\$—	\$6,000,000	\$105,659,550
Cash-Adjusted Enterprise Value / Revenue	30.0%	1.5 ×	\$60,450,000	\$90,675,000	\$3,000,000	\$—	\$6,000,000	\$99,675,000
Next 12 Months								
Cash-Adjusted Enterprise Value / EBITDA	20.0%	9.5 ×	\$10,971,675	\$104,230,913	\$3,000,000	\$—	\$6,000,000	\$113,230,913
Cash-Adjusted Enterprise Value / Revenue	10.0%	1.4 ×	\$66,495,000	\$93,093,000	\$3,000,000	\$—	\$6,000,000	\$102,093,000
	100.0%							
Weighted Indicated Fair Value—Minority, Marketable Basis (Rounded)								\$105,000,000

(1) Weighting is based on informed judgment, the depth, breadth, and comparability of underlying data and the appropriateness of the models used under each technique. When multiple valuation techniques are used, the results (respective indications of fair value) are evaluated and weighted, as appropriate, considering the reasonableness of the range indicated by those results.

(2) No debt has been allocated to the reporting unit.

(3) Represents a nonoperating asset not otherwise reflected in the technique.

(4) Earnings Before Interest, Taxes, Depreciation, and Amortization.

Schedule 4.10.1

FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Unit
 Market Approach: Guideline Public Company Method—Analysis of Guideline Group (US\$ Millions)

Company	Shares Outstanding	(A)	(B)	=(A)*(B) (C)	(D)	(E)	(F)	=(C)+(D)+ (E)-(F)	Revenues			EBITDA (5)			Revenue Multiples			EBITDA Multiples		
									Minority Market Cap	Other	Debt	Cash	EV (2)	LTM (3)	NY1 (4)	LTM	NY1	NY1 Revenue	LTM Revenue	NY1 EBITDA
Guideline Co. 1	85.0	\$50.00	4,250.0	—	850.0	71.0	5,029.0	2,928.6	3,221.5	512.5	580.0	1.7x	1.6x	9.8x	8.7x					
Guideline Co. 2	30.0	\$32.00	960.0	—	300.0	21.0	1,239.0	1,255.0	1,267.6	125.5	150.0	1.0x	1.0x	9.9x	8.3x					
Guideline Co. 3	280.0	\$21.33	5,972.4	—	301.0	59.0	6,214.4	2,990.5	3,259.6	747.6	788.0	2.1x	1.9x	8.3x	7.9x					
Guideline Co. 4	50.0	\$7.00	350.0	—	200.0	23.0	527.0	900.0	1,035.0	22.5	46.0	0.6x	0.5x	NMF (6)	11.5x					
Guideline Co. 5	150.0	\$14.44	2,166.0	—	1,000.0	43.0	3,123.0	1,713.2	1,884.5	296.4	320.0	1.8x	1.7x	10.5x	9.8x					

(continued)

Company	Shares Outstanding	(A) Price	(B) Market Cap	(C) Minority Cap	(D) Other (1)	(E) Debt	(F) Cash	=(C)+(D)+(E)-(F)		Revenues		EBITDA (5)		Revenue Multiples		EBITDA Multiples	
								EV (2)	LTM (3)	NY1 (4)	LTM	NY1	EV/ LTM Revenue	EV/ NY1 Revenue	EV/ LTM EBITDA	EV/ NY1 EBITDA	
Guideline Co. 6	38.0	\$18.00	684.0	—	511.0	257.0	938.0	829.0	804.1	91.2	92.0	1.1x	1.2x	10.3x	10.2x		
Guideline Co. 7	126.0	\$9.50	1,197.0	—	340.0	12.0	1,525.0	736.7	810.4	132.6	144.0	2.1x	1.9x	11.5x	10.6x		
Guideline Co. 8	111.0	\$7.50	832.5	—	3.5	1.0	836.6	560.9	532.9	67.3	82.0	1.5x	1.6x	12.4x	10.2x		
Guideline Co. 9	30.0	\$11.22	336.6	—	205.0	11.0	530.6	407.6	428.0	49.7	62.0	1.3x	1.2x	10.7x	8.6x		
Subject Company—East Unit							60.5	66.5	9.3	11.0							
							HIGH	2,990.5	3,259.6	747.6	788.0	2.1x	1.9x	12.4x	11.5x		
							MEAN	1,369.1	1,471.5	227.3	251.6	1.5x	1.4x	10.4x	9.5x		
							MEDIAN	900.0	1,035.0	125.5	144.0	1.5x	1.6x	10.4x	9.8x		
							LOW	407.6	428.0	22.5	46.0	0.6x	0.5x	8.3x	7.9x		
Selected Multiples														1.5x	1.4x	10.4x	9.5x

(1) Other includes preferred equity, minority interest, if applicable.

(2) Enterprise Value (EV) = market capitalization + preferred equity + minority interest + total debt - cash.

(3) Latest 12 Months.

(4) Next Year 1.

(5) Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) = operating income + depreciation and amortization.

(6) Not meaningful.

Schedule 4.10.2

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Unit
 Market Approach: Guideline Public Company Method—Metrics Analysis (US\$ Millions)

Company	Revenues			Revenue Growth			EBITDA (4)			EBITDA Margin			EBITDA Growth	
	LTM (1)	NY1 (2)	NY2 (3)	NY1	NY2	LTM	NY1	NY2	LTM	NY1	NY2	NY1	NY2	
Guideline Co. 1	2,928.6	3,221.5	3,479.2	10.0%	8.0%	512.5	612.1	852.4	17.5%	19.0%	24.5%	19.4%	39.3%	
Guideline Co. 2	1,255.0	1,267.6	1,330.9	1.0%	5.0%	125.5	190.1	212.9	10.0%	15.0%	16.0%	51.5%	12.0%	
Guideline Co. 3	2,990.5	3,259.6	3,487.8	9.0%	7.0%	747.6	831.2	906.8	25.0%	25.5%	26.0%	11.2%	9.1%	
Guideline Co. 4	900.0	1,035.0	1,169.6	15.0%	13.0%	22.5	51.8	175.4	2.5%	5.0%	15.0%	130.0%	239.0%	
Guideline Co. 5	1,713.2	1,884.5	2,035.3	10.0%	8.0%	296.4	339.2	508.8	17.3%	18.0%	25.0%	14.5%	50.0%	
Guideline Co. 6	829.0	804.1	844.3	-3.0%	5.0%	91.2	104.5	126.7	11.0%	13.0%	15.0%	14.6%	21.2%	
Guideline Co. 7	736.7	810.4	875.2	10.0%	8.0%	132.6	158.0	218.8	18.0%	19.5%	25.0%	19.2%	38.5%	
Guideline Co. 8	560.9	532.9	612.8	-5.0%	15.0%	67.3	95.9	122.6	12.0%	18.0%	20.0%	42.5%	27.8%	
Guideline Co. 9	407.6	428.0	449.4	5.0%	5.0%	49.7	81.3	94.4	12.2%	19.0%	21.0%	63.5%	16.1%	
Subject Company—East Unit	60.5	66.5	71.8	10.0%	8.0%	9.3	11.0	16.2	15.4%	16.5%	22.5%	18.0%	47.3%	

(continued)

Company	Revenues	Revenue Growth	EBITDA (4)	EBITDA Margin	EBITDA Growth								
HIGH	2,990.5	3,259.6	3,487.8	15.0%	15.0%	747.6	831.2	906.8	25.0%	25.5%	26.0%	130.0%	239.0%
MEAN	1,369.1	1,471.5	1,587.2	5.8%	8.2%	227.3	273.8	357.6	13.9%	16.9%	20.8%	40.7%	50.3%
MEDIAN	900.0	1,035.0	1,169.6	9.0%	8.0%	125.5	158.0	212.9	12.2%	18.0%	21.0%	19.4%	27.8%
LOW	407.6	428.0	449.4	-5.0%	5.0%	22.5	51.8	94.4	2.5%	5.0%	15.0%	11.2%	9.1%

(1) Latest 12 Months.

(2) Next Year 1.

(3) Next Year 2.

(4) Earnings Before Interest, Taxes, Depreciation, and Amortization.

Schedule 4.11

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Unit
 Market Approach: Guideline Company Transactions Method—Indication of Value (US\$)

Valuation Multiples	Weighting (1)	Selected Multiple	Financial Statistic	Preliminary Enterprise Value	Add: Cash and Cash Equivalents	Less: Fair Value of Debt (2)	Add: Equity Method Investments (3)	Cash-Adjusted Equity Value
Latest 12 Months								
Enterprise Value / EBITDA (4)	70.0%	9.5 ×	\$9,294,188	\$88,294,781	\$3,000,000	\$—	\$6,000,000	\$97,294,781
Enterprise Value / Revenue	30.0%	1.7 ×	\$60,450,000	\$102,765,000	\$3,000,000	\$—	\$6,000,000	\$111,765,000
Indicated Fair Value—Control, Marketable Basis								\$101,636,000

(1) Weighting is based on informed judgment, the depth, breadth, and comparability of underlying data and the appropriateness of the models used under each technique. When multiple valuation techniques are used, the results (respective indications of fair value) are evaluated and weighted, as appropriate, considering the reasonableness of the range indicated by those results.

(2) No debt has been allocated to the reporting unit.

(3) Represents a nonoperating asset not otherwise reflected in the technique.

(4) Earnings Before Interest, Taxes, Depreciation, and Amortization.

Schedule 4.11.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)—East Unit
 Market Approach: Guideline Company Transactions Method—Transaction Data (US\$ Millions)

Target Company	Acquirer	Date Completed	Implied Enterprise Value	EV (1) / Revenue	Multiples		Control Premium
					EV/ EBITDA (2)	1 Month Prior	
Target 1	Acquirer 1	12/15/201X	561.6	2.0x	9.8x	26.0%	
Target 2	Acquirer 2	11/25/201X	400.5	0.8x	7.5x	30.0%	
Target 3	Acquirer 3	9/27/201X	237.4	2.0x	8.0x	11.0%	
Target 4	Acquirer 4	9/18/201X	119.0	2.5x	NMF (3)	30.0%	
Target 5	Acquirer 5	9/10/201X	179.0	2.2x	—	25.0%	
Target 6	Acquirer 6	8/24/201X	293.5	1.5x	10.5x	27.0%	
Target 7	Acquirer 7	7/26/201X	67.7	1.8x	11.8x	31.0%	
Target 8	Acquirer 8	6/24/201X	77.4	2.0x	NMF	40.0%	
Target 9	Acquirer 9	6/20/201X	199.9	1.2x	12.5x	38.0%	
Target 10	Acquirer 10	6/13/201X	926.1	0.9x	8.2x	15.0%	
Target 11	Acquirer 11	5/22/201X	147.5	1.1x	8.5x	50.0%	
Target 12	Acquirer 12	5/21/201X	259.8	1.1x	9.5x	40.0%	
Target 13	Acquirer 13	2/19/201X	2,251.5	2.8x	NMF	20.0%	
Target 14	Acquirer 14	2/11/201X	175.0	1.9x	—	33.0%	

Target Company	Acquirer	Date Completed	Implied Enterprise Value	Multiples			1 Month Prior
				EV (1) / Revenue	EV/ EBITDA (2)	Control Premium	
HIGH			2,251.5	2.8x	12.5x	50.0%	
MEAN			421.1	1.7x	9.6x	29.7%	
MEDIAN			218.7	1.9x	9.5x	30.0%	
LOW			67.7	0.8x	7.5x	11.0%	
Selected Multiples				1.7x	9.5x		

(1) Enterprise Value.

(2) Earnings Before Interest, Taxes, Depreciation, and Amortization.

(3) Not meaningful.

Schedule 4.12

ABC Company
 FASB ASC 350 Example
 Summary of Step 1 Goodwill Impairment Test—East Reporting Unit
 Fair Value of Reporting Unit

Taxable Transaction

	Discounted Cash Flow Method	Guideline Public Company Method	Guideline Company Transactions Method
Net Asset Value (Minority, Marketable)	N/A	\$105,000,000	N/A
Control Premium	N/A	20% (1)	N/A
Net Asset Value (Control, Marketable)	114,300,000	124,200,000	101,636,000
Weighting (2)	60%	20%	20%
	68,580,000	24,840,000	20,327,200
Fair Value of Equity (Net Assets)—East Unit			113,750,000

(1) Represents a comprehensive premium that includes synergies and all other elements of control available to a market participant in a control transaction, including any assumed tax shield associated with a step up in basis. When applying control premiums, one would need to carefully assess individual facts and circumstances and ensure that the level of documentation and support is consistent with the magnitude of the control premium applied. In the guideline public company method, the control premium was applied to the indicated value excluding cash balances and nonoperating assets. Cash and nonoperating assets are added to the indication after application of the premium.

(2) Weighting is based on informed judgment, the depth, breadth, and comparability of underlying data and the appropriateness of the models used under each technique. When multiple valuation techniques are used, the results (respective indications of fair value) are evaluated and weighted, as appropriate, considering the reasonableness of the range indicated by those results.

Schedule 4.13

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Comparison to Market Capitalization—Consolidated (US\$)

Summary of Fair Values Supporting ASC 350 Goodwill Impairment Test

	Carrying Amount	Fair Value
East Reporting Unit	\$80,333,667	\$113,750,000
West Reporting Unit (Given)	39,920,381	50,000,000
Corporate (1)	(23,474,333)	(23,474,333)
Total Consolidated Equity Value	\$96,779,714	\$140,275,667

Concluded Consolidated Equity Value for Impairment Testing	(A)	\$140,275,667
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Market Data

Measurement Date Share Price (2)		\$21.00
Total Number of Shares Outstanding		5,000,000
Market Value of Equity		105,000,000
Fair Value of Noncontrolling Interest (Given)	(3)	10,000,000
Market Value of Total Equity	(B)	\$115,000,000

Comparison to Market Capitalization

Concluded Consolidated Equity Value for Impairment Testing		\$140,275,667
Market Value of Total Equity		\$115,000,000
Implied Premium (\$)		\$25,275,667
Implied Premium (%)	((A)/(B))-1	22%

(1) See schedule 4.13.1 for fair value calculation.

(2) Based on a representative horizon of stable pricing.

(3) As of measurement date, this amount does not reflect any adjustment for lack of control.

Comments: The 22 percent implied premium in this schedule is consistent with the ranges presented in schedule 4.11.1, and is considered reasonable. See schedule 4.14 for additional analysis of reconciling items (discussed in paragraph 4.83).

Schedule 4.13.1

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Fair Value of Corporate Net Assets (US\$)

Corporate Net Assets

Total Corporate Net Assets	27,175,667
Less: Current Debt Free Liabilities	<u>650,000</u>
Corporate Enterprise Value	<u>26,525,667</u>
Less: Current and Long-Term Debt	<u>50,000,000</u>
Fair Value of Corporate Net Assets	<u>(23,474,333)</u>

Comments: This calculation supports the fair value of the corporate entity presented in schedule 4.13, which is used as a basis to observe the implied control premium from the analysis. Note that this example does not reflect any unallocated items of corporate overhead.

In this comprehensive example, some items of corporate expenses are not allocated to specific reporting units based on market participant and unit of account or unit of valuation considerations. The Impairment Task Force (task force) has observed that the elimination of these corporate items is reflected in the respective fair value of the East and West reporting units (elimination of redundant costs is captured in the respective cash flows of each unit) that is reflected in the calculation of the implied control premium in schedule 4.13. When estimating the fair value of the corporate entity to include in the calculation of the implied control premium in schedule 4.13, the fair value of the corporate entity is based on the aggregation of individual assets and liabilities of this entity with the presumption that net book value is proxy for fair value. (See preceding calculation.) The redundant costs are not part of the corporate entity value as they are assumed to end upon the hypothetical sale of the reporting units at fair value.

The task force notes that some preparers and specialists will quantify the fair value of the corporate entity by capitalizing the cash flow attributable to this entity. If this method is utilized, any items of corporate overhead that have been removed from the prospective financial information supporting the fair value conclusions of reporting units, would need to continue to be excluded from the corporate entity's cash flows. The task force believes that, in most cases, any remaining cash flows would be related to identifiable corporate assets and liabilities and not to general operating expenses. Further, this method may not be applicable for corporate assets and liabilities that do not generate periodic cash flow, such as excess land or environmental liabilities.

Schedule 4.14

ABC Company
 FASB ASC 350 Example
 Fair Value of Equity (Net Assets)
 Comparison to Market Capitalization—Reconciling Items (US\$)

Comparison to Market Capitalization—Reconciling Components		
Concluded Consolidated Equity Value for Impairment Testing	(A)	\$140,275,667
Market Value of Total Equity	(B)	\$115,000,000
Implied Premium (\$)		\$25,275,667
Implied Premium (%)	((A)/(B))-1	22.0%
 <i>Identified Components of the Implied Premium</i>		
Cost Savings—East		\$18,300,000
Cost Savings—West (Given)		4,500,000
Fair Value Step Up From Taxable Transaction Assumption		<u>1,350,000</u>
Total Identified Components of Implied Premium		<u>24,150,000</u>
Total Unidentified Components of Implied Premium		1,125,667

Comments: This schedule is a continuation of schedule 4.13. It identifies components that explain some of the differences between aggregate fair value used in impairment testing with the observable market capitalization of the company. The nature and extent of further reconciliation will be based on specific facts and circumstances. In general, the Impairment Task Force believes that larger differences in the two observations would require a higher level of documentation and support.

Schedule 4.15

ABC Company

FASB ASC 350 Example

Fair Value of Equity (Net Assets)

Second Step of the Goodwill Impairment Test—Taxable Transaction (US\$)

	Historical Cost East Reporting Unit	FASB ASC 805 Adjustments (Given)	FASB ASC 805 Step 2
Assets			
Cash and Cash Equivalents	3,000,000	\$—	\$3,000,000
Accounts Receivable, Net	9,900,000	(400,000)	9,500,000
Inventories	1,500,000	250,000	1,750,000
Inter-Company Due To or From	(3,000,000)		(3,000,000)
Prepaid Expenses and Other	150,000	—	150,000
Total Current Assets	<u>11,550,000</u>	<u>(150,000)</u>	<u>11,400,000</u>
Property, Plant, and Equipment			
Gross Property, Plant, and Equipment	13,250,000	(1,250,000)	12,000,000
Less: Accumulated Depreciation	<u>(883,333)</u>	<u>883,333</u>	<u>—</u>
Net Property, Plant, and Equipment	<u>12,366,667</u>	<u>(366,667)</u>	<u>12,000,000</u>
Intangible Assets (Other Than Goodwill), Net of Amortization			
Covenants Not to Compete	2,250,000	(500,000)	1,750,000
Trade Secrets	6,000,000	500,000	6,500,000
Brandname (Previously Unrecognized)	—	2,000,000	2,000,000
Product Trade Name	6,000,000	2,000,000	8,000,000
Favorable Leases	4,920,000	(220,000)	4,700,000
Customer Relationships	10,800,000	(1,500,000)	9,300,000
Accumulated Amortization	<u>(2,753,000)</u>	<u>2,753,000</u>	<u>—</u>
Total Net Intangible Assets	<u>27,217,000</u>	<u>5,033,000</u>	<u>32,250,000</u>
Other Assets			
Equity Method Investments	<u>6,000,000</u>	<u>—</u>	<u>6,000,000</u>

	Historical Cost East Reporting Unit	FASB ASC 805 Adjustments (Given)	FASB ASC 805 Step 2
Total Other Assets	6,000,000	—	6,000,000
Goodwill	39,000,000	(12,850,000)	26,150,000
Total Assets	<u>96,133,667</u>	<u>(8,333,667)</u>	<u>87,800,000</u>
Liabilities and Equity			
Accounts Payable	6,600,000	—	6,600,000
Accrued Salaries and Wages	1,200,000	—	1,200,000
Total Current Liabilities	7,800,000	—	7,800,000
Deferred Tax Liability (1)	(5,000,000)	(5,000,000)	—
Total Liabilities	<u>12,800,000</u>	<u>(5,000,000)</u>	<u>7,800,000</u>
Equity			
Shareholder's Equity	73,333,667	(3,333,667)	70,000,000
Noncontrolling Interest	10,000,000		10,000,000
Total Equity	83,333,667	(3,333,667)	80,000,000
Total Liabilities and Equity	<u>96,133,667</u>	<u>(8,333,667)</u>	<u>87,800,000</u>
Identifiable Assets and Liabilities Measured as per FASB ASC 805			
			\$53,850,000
Step 1 Fair Value (Given) (2)			80,000,000
Implied Fair Value of Reporting Unit Goodwill			26,150,000
Carrying Value of Reporting Unit Goodwill			39,000,000
Impairment			<u>\$(12,850,000)</u>

(1) To eliminate deferred taxes consistent with a taxable transaction.

(2) Represents a hypothetical net asset amount used for the purposes of illustrating step 2 of the goodwill impairment test. This total will not reconcile to the other schedules.

Schedule 4.16

ABC Company

FASB ASC 350 Example

Fair Value of Equity (Net Assets)

Second Step of the Goodwill Impairment Test—Nontaxable Transaction (US \$)

	Historical Cost East Reporting Unit	FASB ASC 805 Adjustments (Given)	FASB ASC 805 Step 2
Assets			
Cash and Cash Equivalents	\$3,000,000	\$—	\$3,000,000
Accounts Receivable, Net	9,900,000	(400,000)	9,500,000
Inventories	1,500,000	250,000	1,750,000
Inter-Company Due To or From	(3,000,000)		(3,000,000)
Prepaid Expenses and Other	150,000	—	150,000
Total Current Assets	<u>11,550,000</u>	<u>(150,000)</u>	<u>11,400,000</u>
Property, Plant, and Equipment			
Gross Property, Plant, and Equipment	13,250,000	(1,250,000)	12,000,000
Less: Accumulated Depreciation	(883,333)	883,333	—
Net Property, Plant, and Equipment	<u>12,366,667</u>	<u>(366,667)</u>	<u>12,000,000</u>
Intangible Assets (Other Than Goodwill), Net of Amortization			
Covenants Not to Compete	2,250,000	(500,000)	1,750,000
Trade Secrets	6,000,000	500,000	6,500,000
Brandname (Previously Unrecognized)	—	2,000,000	2,000,000
Product Trade Name	6,000,000	2,000,000	8,000,000
Favorable Leases	4,920,000	(220,000)	4,700,000
Customer Relationships	10,800,000	(1,500,000)	9,300,000
Accumulated Amortization	(2,753,000)	2,753,000	—
Total Net Intangible Assets	<u>27,217,000</u>	<u>5,033,000</u>	<u>32,250,000</u>
Other Assets			
Equity Method Investments	6,000,000	—	6,000,000
Total Other Assets	<u>6,000,000</u>	<u>—</u>	<u>6,000,000</u>
Goodwill	39,000,000	(17,109,224)	21,890,776

	Historical Cost East Reporting Unit	FASB ASC 805 Adjustments (Given)	FASB ASC 805 Step 2
Total Assets	<u>\$96,133,667</u>	<u>\$(12,592,891)</u>	<u>\$83,540,776</u>
Liabilities and Equity			
Accounts Payable	6,600,000	—	6,600,000
Accrued Salaries and Wages	<u>1,200,000</u>	<u>—</u>	<u>1,200,000</u>
Total Current Liabilities	7,800,000	—	7,800,000
Deferred Tax Liability (1)	8,000,000	1,740,776	9,740,776
Total Liabilities	<u>15,800,000</u>	<u>1,740,776</u>	<u>17,540,776</u>
Equity			
Shareholder's Equity	70,333,667	(14,333,667)	56,000,000
Noncontrolling Interest	10,000,000		10,000,000
Total Equity	80,333,667	(14,333,667)	66,000,000
Total Liabilities and Equity	<u>\$96,133,667</u>	<u>\$(12,592,891)</u>	<u>\$83,540,776</u>
Identifiable Assets and Liabilities Measured in Accordance with ASC 805			\$53,850,000
Step 1 Fair Value (Given) (2)			74,000,000
Implied Fair Value of Reporting Unit Goodwill			20,150,000
Carrying Value of Reporting Unit Goodwill			39,000,000
Incremental Deferred Tax Liability			1,740,776
Impairment			<u>\$ (17,109,224)</u>

(1) To record deferred tax effects associated with changes in values of assets and liabilities. Income tax rate is based on schedule 4.9.

(2) Represents a hypothetical net asset amount used for the purposes of illustrating step 2 of the goodwill impairment test. This total will not reconcile to the other schedules.

Appendix A

Disclosure of Goodwill and Goodwill Impairment Testing

This appendix includes example disclosures of the requirements contained in Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) 350, *Intangibles—Goodwill and Other*, as well as those of Item 303 of Regulation S-K for a hypothetical entity, Entity A. These examples are provided solely for illustration purposes; each disclosure should be based on the individual facts and circumstances of each transaction and its related valuation. In this example, it is assumed that Entity A is a manufacturer with four reporting units (RU1, RU2, RU3, and RU4) and has a December 31 year end. Also assume that prior to 2X09, RU1, which is a part of Segment A, had recognized impairment losses totaling \$9,583. The following disclosures are for the period ending December 31, 2X10.

The Impairment Task Force (task force) has observed that the Securities and Exchange Commission's (SEC) staff focuses on accounting policies and related judgments made by management in assessing goodwill for impairment (which are disclosed pursuant to requirements of Item 303 of Regulation S-K) in addition to the details of recognized goodwill impairments (if any) as required by FASB ASC 350. If the SEC staff perceives the existing disclosures to be boilerplate or unclear, it may issue comments seeking enhanced information. Areas of SEC staff focus may change based on its observations of overall disclosure quality, however, examples of areas of past focus include the following:

- The accounting policies relating to the goodwill impairment tests, including when the goodwill impairment test is performed, identification of reporting units, and how goodwill is assigned to reporting units.
- How the fair value of each reporting unit was estimated and the significant assumptions and estimates used in its determination of the fair value of reporting units, including a discussion of the level of uncertainties pertaining to key assumptions.
- Whether reporting units with material amounts of goodwill are at risk (that is, a reasonable possibility exists that the reporting unit might be required to recognize and measure a goodwill impairment) and, if so, which ones and by how much (that is, percentage by which fair value exceeds carrying amount). Specifically, section 9510.3 of the SEC Financial Reporting Manual indicates that

[r]egistrants should consider providing the following disclosures for each reporting unit that is at risk of failing step one of the impairment test (defined in ASC Topic 350):

- a. The percentage by which fair value exceeded carrying value as of the date of the most recent test;
- b. The amount of goodwill allocated to the reporting unit;
- c. A description of the methods and key assumptions used and how the key assumptions were determined;

- d. A discussion of the degree of uncertainty associated with the key assumptions. The discussion regarding uncertainty should provide specifics to the extent possible (e.g., the valuation model assumes recovery from a business downturn within a defined period of time); and
 - e. A description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.
- The facts and circumstances leading to an impairment (if applicable).

Registrants may also be asked to provide the following information supplementally (that is, this information is provided directly to the SEC staff and is not part of the publicly disclosed management discussion and analysis disclosures):

- Details of the goodwill impairment analysis for each reporting unit, including how reporting units are identified and how assets, liabilities, and goodwill are assigned to reporting units
- Details of the registrant's analysis of events or circumstances that occurred since the latest annual goodwill impairment assessment and whether those events or circumstances indicate that it is more likely than not that the fair value of a reporting unit has fallen below its carrying amount
- The comparison of the aggregate fair values of the reporting units to the registrant's market capitalization

Entity A

Notes to Consolidated Financial Statements

Summary of Significant Accounting Policies

Goodwill is the excess of the consideration transferred over the fair value of the acquired assets and assumed liabilities in a business combination. Goodwill is not amortized but rather tested for impairment at least annually. We test goodwill for impairment on the first day of the fourth quarter each fiscal year. Goodwill is also tested for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of the reporting unit below its carrying amount. When testing goodwill for impairment, we may assess qualitative factors for some or all of our reporting units to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount, including goodwill. Alternatively, we may bypass this qualitative assessment for some or all of our reporting units and perform step 1 of the two-step goodwill impairment test. If we perform step 1 and the carrying amount of the reporting unit exceeds its fair value, we would perform step 2 to measure such impairment.

Impairment testing for goodwill is done at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment (also known as a component). A component of an operating segment is a reporting unit if the component constitutes a business for which discrete financial information is available, and segment management regularly reviews the operating results of that component.

Entity A

Notes to Consolidated Financial Statements

Goodwill

We have two operating and reportable segments (Segment A and Segment B) that have been identified under FASB ASC 280, *Segment Reporting*; the first contains three components, the second has two components. We have determined that two of the components in Segment A are economically similar and are deemed a single reporting unit. As a result, we have four reporting units; RU1 and RU2 are part of Segment A, and RU3 and RU4 are part of Segment B.

We assigned assets and liabilities to each reporting unit based on either specific identification or by using judgment for the remaining assets and liabilities that are not specific to a reporting unit. Goodwill was assigned to the reporting units based on a combination of specific identification and relative fair values.

In 2X10, for RU2 and RU4, we qualitatively assessed whether it is more likely than not that the respective fair values of these reporting units are less than their carrying amounts, including goodwill. Based on that assessment, we determined that this condition, for both reporting units, does not exist. As such, performing the first step of the two-step test impairment test for these reporting units was unnecessary.

For all reporting units in 2X09 and for RU1 and RU3 in 2X10, we compared the carrying amount of each reporting unit, inclusive of assigned goodwill, to its respective fair value—step 1 of the two-step impairment test. We estimated the fair value of these reporting units by weighting results from the market approach and the income approach. Significant assumptions inherent in the valuation methodologies for goodwill are employed and include, but are not limited to, prospective financial information, growth rates, terminal value, discount rates, and comparable multiples from publicly traded companies in our industry. Based on this quantitative test, we determined that the fair value of each reporting unit tested in 2X09 and 2X10 exceeded its carrying amount and, therefore, step 2 of the two-step goodwill impairment test was unnecessary.

After completing our annual impairment reviews for each reporting unit during the fourth quarter of 2X10 and 2X09, we concluded that goodwill was not impaired in either of these years.

The following is a summary of activity in goodwill by reportable segment.

(In thousands)

	<u>Segment A</u>	<u>Segment B</u>	<u>Total</u>
Balance, December 31, 2X08			
Goodwill	\$531,884	\$225,202	\$757,086
Accumulated impairment losses	(9,583)		(9,583)
	<u>522,301</u>	<u>225,202</u>	<u>747,503</u>
Goodwill acquired during 2X09 ¹	12,785	—	12,785

(continued)

¹ Financial Accounting Standards Board *Accounting Standards Codification* 805-20-50-1(c) requires that for each business combination that occurs during the reporting period the acquirer discloses, among other things, “[t]he amounts recognized as of the acquisition date for each major class of assets acquired and liabilities assumed.” To comply with this requirement, the section titled “Notes to the Consolidated Financial Statements” would need to include a note on acquisitions that provides a breakdown of the net assets acquired, including goodwill. This disclosure is not included in this appendix.

Testing Goodwill for Impairment

	<u>Segment A</u>	<u>Segment B</u>	<u>Total</u>
Goodwill written off related to sale of business unit	(6,240)	(5,027)	(11,267)
Currency translation	<u>27,452</u>	<u>11,843</u>	<u>39,295</u>
Balance, December 31, 2X09			
Goodwill	565,881	232,018	797,899
Accumulated impairment losses	<u>(9,583)</u>		<u>(9,583)</u>
	<u>556,298</u>	<u>232,018</u>	<u>788,316</u>
Goodwill acquired during 2X10	—	15,678	15,678
Currency translation	<u>(15,040)</u>	<u>(11,928)</u>	<u>(26,968)</u>
Balance, December 31, 2X10			
Goodwill	550,841	235,768	786,609
Accumulated impairment losses	<u>(9,583)</u>		<u>(9,583)</u>
	<u>\$541,258</u>	<u>\$235,768</u>	<u>\$777,026</u>

Entity A

Form 10-K

Management Discussion and Analysis of Financial Condition and Results of Operations, Critical Accounting Estimates

Goodwill

Goodwill is evaluated for impairment annually or whenever we identify certain triggering events or circumstances that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, macro and reporting unit specific economic factors (for example, interest rate and foreign exchange rate fluctuations, and loss of key personnel), supply costs, unanticipated competitive activities, and acts by governments and courts.

We test for goodwill impairment on the first day of the fourth quarter each fiscal year. In 2X10, for RU2 and RU4, we qualitatively assessed whether it is more likely than not that the fair values of these reporting units were less than their carrying amounts. For RU1 and RU3, we tested for goodwill impairment by quantitatively comparing the fair values of those reporting units to their carrying amounts.

For RU1 and RU3, we estimated the fair value by weighting the results from the income approach and the market approach. These valuation approaches consider a number of factors that include, but are not limited to, prospective financial information, growth rates, terminal value, discount rates, and comparable multiples from publicly traded companies in our industry and require us to make certain assumptions and estimates regarding industry economic factors and future profitability of our business.

When performing our income approach for each reporting unit, we incorporate the use of projected financial information and a discount rate that are developed using market participant based assumptions. The cash-flow projections are based on five-year financial forecasts developed by management that include revenue projections, capital spending trends, and investment in working capital to support anticipated revenue growth, which are updated at least

annually and reviewed by management. The selected discount rate considers the risk and nature of the respective reporting unit's cash flows and the rates of return market participants would require to invest their capital in our reporting units.

When performing our market approach for each reporting unit, we rely specifically on the guideline public company method. Our guideline public company method incorporates revenue and earnings multiples from publicly traded companies with operations and other characteristics similar to each reporting unit. The selected multiples consider each reporting unit's relative growth, profitability, size, and risk relative to the selected publicly traded companies.

If we determine that the carrying amount of a reporting unit exceeds its fair value, we would then calculate the implied fair value of the reporting unit goodwill as compared to its carrying amount to determine the appropriate impairment charge. Although we believe our assumptions are reasonable, actual results may vary significantly and may expose us to material impairment charges in the future. Our methodology for determining fair values remained consistent for the periods presented.

For the qualitative analysis performed for RU2 and RU4, we have taken into consideration all the events and circumstances listed in FASB ASC 350, *Intangibles—Goodwill and Other*, in addition to other entity-specific factors. For example, for RU2 and RU4, although pricing for our products declined modestly, our gross margins increased due to lower than expected raw material costs, which flowed through to operating margin. We considered the fact that no new competitors entered the marketplace in our industry and that consumer demand for the industry's products remains constant, if not growing slightly. Also, economic factors over the past year did not significantly affect the discount rates used for the valuation of these reporting units. In addition, although the president of RU2 resigned in 2X10, we replaced him with an individual who formerly served as the chief operating officer of a competitor. Lastly, we considered the 2X09 quantitative analysis performed for all reporting units which indicated that the fair values of these reporting units significantly exceeded their carrying amounts. We concluded that the events in 2X10 did not have a significant impact on the fair values of RU2 and RU4. Therefore, we determined that it was not necessary to perform a quantitative goodwill impairment test for RU2 and RU4.

After completing our annual impairment reviews for each reporting unit during the fourth quarter of 2X10 and 2X09, we concluded that goodwill was not impaired in either of these years.

In addition, as of December 31, 2X10, we did not have any reporting units that were at risk of failing the first step of the goodwill impairment test. The estimated fair values of RU1 and RU3 significantly exceeded their carrying amounts at the date of testing. We applied a hypothetical 10 percent decrease to the fair values of these reporting units, which at December 31, 2X10, would not have triggered additional impairment testing and analysis.

Appendix B

Table of Responsibilities of Management and the External Valuation Specialist

A valuation specialist may be external or internal. When an external valuation specialist is used, the following table summarizes the respective responsibilities of management and the valuation specialist related to a valuation of a reporting unit(s) when testing goodwill for impairment in accordance with this guide. For some entities, the board of directors may assume or share with management one or more of the responsibilities listed for management. For purposes of this appendix, the term *management* may therefore also apply to the board of directors. The responsibilities of the independent auditor are not provided in this table as the decision regarding the choice of valuation specialist and the extent of their involvement should be made by management alone. The Impairment Task Force (task force) intends the information in the table to be descriptive rather than prescriptive.

Responsibilities of Management and the External Valuation Specialist

	<i>Management Responsibilities</i>	<i>Valuation Specialist's Responsibilities</i>
<i>Selecting the Valuation Specialist</i>	Select a qualified valuation specialist.	Provide honest and complete disclosures about expertise, experience, credentials, references, and capability to meet the objective.
	Determine the valuation specialist's willingness to be referred to as an expert in filings with regulators.	Before accepting and completing a valuation engagement, discuss with management under what circumstances, if any, he or she would be willing to be referred to as an expert in filings with regulators.
	Determine the valuation specialist's willingness to support the valuation report in discussions with regulators and others.	Be prepared to support the valuation report in discussions with regulators and others.

(continued)

	<i>Management Responsibilities</i>	<i>Valuation Specialist's Responsibilities</i>
<i>Performing a Valuation</i>	Define the objective for the involvement of the specialist.	Before commencing procedures on the valuation, ensure an appropriate understanding of the nature and scope of the work that is being asked of the specialist.
	Provide comprehensive and accurate information to the valuation specialist about business conditions and about future business plans and associated conditions.	Evaluate the reasonableness of the assumptions and other information provided by management.
	Respond to inquiries of the valuation specialist.	Select appropriate valuation techniques. Use appropriate experts (for example, engineers) as necessary to assist in the valuation.
	Assume responsibility for the inputs and outputs of the valuation and the valuation techniques and assumptions used in the valuation.	Develop appropriate assumptions for use in conjunction with valuation techniques.
	Review the valuation report and discuss with the valuation specialist the basis for the conclusions reached in order to understand and evaluate them.	Complete the valuation on a timely basis and document the work performed.

Glossary

This glossary contains terms from the following sources when indicated:

- *International Glossary of Business Valuation Terms* (IGBVT), which has been adopted by a number of professional societies and organizations, including the AICPA
- Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC)
- Statement on Standards for Valuation Services (SSVS) No. 1, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset* (AICPA, *Professional Standards*, VS sec. 100)

acquisition premium. In a merger or an acquisition, the difference between the purchase price and preacquisition value of the target firm.¹

active market. A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. (FASB ASC Master Glossary)

asset approach. A general way of determining a value indication of a business, business ownership interest, or security using one or more methods based on the value of the assets net of liabilities. Also known as asset-based approach. (IGBVT)

conditional cash flows. Cash flows that are conditional upon the occurrence of specified events. (FASB ASC 820-10-55-10)

control. The power to direct the management and policies of a business enterprise. (IGBVT)

control premium.² An amount or a percentage by which the pro rata value of a controlling interest exceeds the pro rata value of a noncontrolling interest in a business enterprise to reflect the power of **control**. (IGBVT)

cost approach. A valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). (FASB ASC Master Glossary)

A general way of determining a value indication of an individual asset by quantifying the amount of money required to replace the future service capability of that asset. (IGBVT)

cost of capital. The expected rate of return that the market requires in order to attract funds to a particular investment. (IGBVT)

cushion. The excess of the reporting unit's fair value over its carrying amount.

¹ As of the writing of this guide, the Appraisal Foundation is working on a project regarding the assessment and measurement of control premiums in valuations for financial reporting. The purpose of this project is to present views on how to approach and apply certain aspects of the valuation process appropriate for measuring the fair value of controlling interests in business enterprises for financial reporting purposes. Please refer to the Appraisal Foundation's website at www.appraisalfoundation.org for further information about this project and its status.

² See footnote 1 in the glossary.

- discount rate.** A rate of return used to convert a future monetary sum into present value. (IGBVT)
- discount rate adjustment technique.** A present value technique that uses a risk-adjusted **discount rate** and contractual, promised, or most likely cash flows. (FASB ASC Master Glossary)
- discounted cash flow (DCF) method.** A method within the **income approach** whereby the present value of future expected net cash flows is calculated using a **discount rate**. (IGBVT)
- EBIT.** Earnings before interest and taxes.
- EBITDA.** Earnings before interest, taxes, depreciation, and amortization.
- EITF.** Emerging Issues Task Force of the Financial Accounting Standards Board.
- enterprise value.** For purposes of this guide, **enterprise value** is defined as the value of equity and interest-bearing debt. In broader valuation practice, the term **enterprise value** is sometimes used to refer to the value of equity and interest-bearing debt, less all cash and equivalents; however, for this guide, the Impairment Task Force considers **enterprise value** to include cash and cash equivalents. **Enterprise value** may also be referred to as invested capital, **market value of invested capital (MVIC)**, or total **enterprise value**.
- equity value.** For purposes of this guide, the **enterprise value** less the fair value of debt.
- expected cash flow.** The probability-weighted average (that is, mean of the distribution) of possible future cash flows. (FASB ASC Master Glossary)
- expected present value technique.** The **expected present value technique** uses as a starting point a set of cash flows that represents the probability-weighted average of all possible future cash flows (that is, the **expected cash flows**). The resulting estimate is identical to expected value, which, in statistical terms, is the weighted average of a discrete random variable's possible values with the respective probabilities as the weights. Because all possible cash flows are probability-weighted, the resulting **expected cash flow** is not conditional upon the occurrence of any specified event (unlike the cash flows used in the **discount rate adjustment technique**). (FASB ASC 820-10-55-13)
- fair value.** The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between **market participants** at the measurement date. (FASB ASC 820, *Fair Value Measurement*)
- FASB.** Financial Accounting Standards Board.
- goodwill.** An asset representing the future economic benefits arising from other assets acquired in a business combination or an acquisition by a not-for-profit entity that are not individually identified and separately recognized. (FASB ASC Master Glossary)
- Gordon growth model.** A version of the long-term growth method used to calculate a **terminal value** in a discounted cash flow analysis. The **Gordon growth model** is used when the entity is expected to have stable long-term growth in the terminal period.

guideline public company method. A method within the **market approach** whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business and that are actively traded on a free and open market. (IGBVT)

guideline company transactions method. A method within the **market approach** whereby market multiples are derived from the sales of entire companies engaged in the same or similar lines of business. (Appendix C, "Glossary of Additional Terms," of SSVS No. 1)

H-Model method. A version of the long-term growth method used to calculate a **terminal value** in a discounted cash flow analysis. The **H-Model method** is used when the entity is expected to have an initial phase of higher growth in the terminal period which declines linearly over the initial phase to reach a subsequent phase of stable long-term growth.

impairment. Impairment is the condition that exists when the carrying amount of goodwill exceeds its implied fair value. (FASB ASC 350-20-35-2)

income approach. Valuation techniques that convert future amounts (for example, cash flows or income and expenses) to a single current (that is, discounted) amount. The fair value measurement is determined on the basis of the value indicated by current market expectations about those future amounts. (FASB ASC Master Glossary)

A general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods that convert anticipated economic benefits into a present single amount. (IGBVT)

Also known as income-based approach.

market approach. A valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable (that is, similar) assets, liabilities, or a group of assets and liabilities, such as a business. (FASB ASC Master Glossary)

A general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interests, securities, or intangible assets that have been sold. (IGBVT)

Also known as market-based approach.

market capitalization. In a publicly traded entity the **market capitalization** is equal to the share price times the number of shares outstanding.

market participants. Buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all of the following characteristics:

- a. They are independent of each other, that is, they are not **related parties**, although the price in a related-party transaction may be used as an input to a fair value measurement if the reporting entity has evidence that the transaction was entered into at market terms

- b. They are knowledgeable, having a reasonable understanding about the asset or liability and the transaction using all available information, including information that might be obtained through due diligence efforts that are usual and customary
- c. They are able to enter into a transaction for the asset or liability
- d. They are willing to enter into a transaction for the asset or liability, that is, they are motivated but not forced or otherwise compelled to do so.
(FASB ASC Master Glossary)

MVIC. Market value of invested capital.

prospective financial information (PFI). Any financial information about the future. The information may be presented as complete financial statements or limited to one or more elements, items, or accounts. (AICPA Guide *Prospective Financial Information*)

related parties. Related parties include the following:

- a. Affiliates of the entity
- b. Entities for which investments in their equity securities would be required, absent the election of the **fair value** option under the “Fair Value Option” subsection of FASB ASC 825-10-15, to be accounted for by the equity method by the investing entity
- c. Trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of management
- d. Principal owners of the entity and members of their immediate families
- e. Management of the entity and members of their immediate families
- f. Other parties with which the entity may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests
- g. Other parties that can significantly influence the management or operating policies of the transacting parties or that have an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests
(FASB ASC Master Glossary)

reporting unit. The level of reporting at which goodwill is tested for impairment. A reporting unit is an operating segment or one level below an operating segment (also known as a component). (FASB ASC Master Glossary)

SSVS. Statement on Standards for Valuation Services, issued by the AICPA and available in *Professional Standards* as VS section 100, *Valuation of a Business, Business Ownership Interest, Security, or Intangible Asset*.

synergy. Used mostly in the context of mergers and acquisitions, the concept that the value and performance of two entities combined will be greater than the sum of the separate individual parts. In the context of developing prospective financial information, synergies may account for some of the difference between the assumptions used to estimate cash flows that are unique to an entity and the assumptions that would be used by **market participants**.

terminal value. The value as of the end of the discrete projection period in a discounted future earnings model. (IGBVT)

In the context of this guide, this represents the reporting unit's value as of the end of the discrete cash flow period in a discounted cash flow model, when earnings are expected to stabilize.

Also known as residual value.

two-stage growth method. A version of the long-term growth method used to calculate a **terminal value** in a discounted cash flow analysis. The **two-stage growth method** is used when the entity is expected to have an initial phase of higher growth in the terminal period followed by a subsequent phase of stable long-term growth.

unobservable inputs. Inputs for which market data are not available and that are developed using the best information available about the assumptions that **market participants** would use when pricing the asset or liability. (FASB ASC Master Glossary)

valuation specialist. An individual recognized as possessing the abilities, skills, and experience to perform valuations. A **valuation specialist** may be external or internal. When referring to the **valuation specialist** in this guide, it is commonly presumed that it is an external party but, if individuals within the entity possess the abilities, skills, and experience to perform valuations, they can also serve in the capacity of a **valuation specialist**.

weighted average cost of capital. The **cost of capital (discount rate)** determined by the weighted average, at market value, of the cost of all financing sources in the business enterprise's capital structure. (IGBVT)

working capital. Current assets minus current liabilities. When a reporting unit's carrying amount is based on an enterprise premise, debt is excluded from the liabilities assigned to the reporting unit; therefore, short-term debt and the current portion of long-term debt is excluded from **working capital**.

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