

Impairment of Assets or Impairment of Financial Information?

The Honors Program
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ABSTRACT

This paper begins with overviews of the Statements of Financial Accounting Standards (SFAS) No. 144 and No. 142 as they pertain to impairments. Subsequent to the overviews, a conceptual evaluation considers how the impairment standards are related to various components of the conceptual framework, including reliability, relevance, and various components within and related to these two characteristics. Incorporated into the discussion is SFAS No. 157 and current fair value measurements in accounting. Controversies surrounding SFAS No. 144 and No. 142 are discussed and companies that have incurred impairment losses or conduct impairment testing on a regular basis are presented. All components of this paper are directed to an analysis of the costs and benefits of impairment testing and the possible result of the trade-off.

INTRODUCTION

As stated in the Financial Accounting Standards Board's (FASB) Statement of Financial Accounting Concepts (SFAC) No. 1 (1978) , a primary objective of financial reporting is to, " provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit and similar decisions...in assessing the amounts, timing, and uncertainty of prospective cash receipts..." Further, "financial reporting should provide information about the economic resources of an enterprise, the claims to those resources...and the effects of transactions, events, and circumstances that change its resources and claims to those resources." (FASB 1978, Page 5).

When long-lived assets are impaired (the fair value of the asset is less than book value), the resources of a company have changed in value. Thus, it is considered important to inform external users, such as creditors and investors, of the change in financial information and to provide them with relevant information. As a result, asset write-downs may provide useful information as to an asset's value, decline in value, and the significance of the decline in regards to how it may affect users of the financial information. If write-downs are important because they show assets at fair value, however, what about write-ups? If assets have increased in value might this be just as important to external users as a decrease in value?

While the principle of conservatism suggests that a write-up not be recorded, the value of writing assets down but not up may be more costly and detrimental to decision making than it is beneficial. Further, several other controversial issues regarding impairment losses support the need for better guidance and, perhaps, a complete move to or away from fair value reporting. This paper will address some of these controversial issues, along with the real impact impairment testing and losses have had on companies. In all, the ultimate question to consider is do the benefits of impairment testing truly outweigh the costs?

The impairment and write-down of long-lived assets and goodwill is an ongoing topic that has been considered, and modified in recent years. In June, 2001, Statement of

Financial Accounting Standards (SFAS) No. 142, Goodwill and Other Intangible Assets, was released. The statement addressed how intangible assets acquired individually or with a group of assets, should be accounted for initially in financial statements. The statement also changed the approach to how goodwill and some other intangible assets are accounted for following their initial recognition. Under previous guidelines, goodwill was amortized, causing the reported book value to decrease in a consistent manner over time. With the release of SFAS No. 142, however, goodwill could no longer be amortized. The mandated change from amortization to impairment testing was primarily due to the fact that financial statement users indicated that goodwill amortization was not useful in analyzing investments.

As intangible assets are an increasingly important economic resource for many enterprises, analysts and users of financial statements have expressed the need for better information about intangibles. Thus, SFAS No. 142 modified previous accounting guidelines to address the need for better and more useful information.

Two months after SFAS No. 142, Statement of Financial Accounting Standards No. 144 (2001), Accounting for the Impairment or Disposal of Long-Lived Assets, was released. This statement superseded FASB Statement No. 121 (1995) but retained the primary focus of SFAS No. 121. As indicated in both SFAS No. 121 and No. 144, an impairment loss is only recognized if the carrying amount of a long-lived asset is not recoverable from its undiscounted future cash flows. The impairment loss and write-down is then measured as the difference between an asset's carrying amount and fair value.

Although the statements have a different primary focus, both act as guidelines in determining the frequency and circumstances of impairment testing, the level to test for impairment, the steps involved in the test, and the measures in determining and disclosing a write-down. The statements were created to improve financial reporting and to make the impairment of long-lived assets a better fit with the conceptual

framework. Thus, SFAC No. 2, Qualitative Characteristics of Accounting Information, can be used to evaluate SFAS No. 142 and No. 144.

The first part of this paper will provide an overview of SFAS No. 144 and 142 as they apply to the impairment of long-lived assets, goodwill, and other intangible assets. Following the overview, a conceptual evaluation will consider impairments as they relate to the conceptual framework of accounting and fair value measurement. In the final section, a practical application of write-downs will be presented with real businesses that have tested for or recorded impairment charges due to a variety of circumstances.

OVERVIEW OF STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 144

Statement of Financial Accounting Standards (SFAS) No. 144 classifies long-lived assets into three categories: (1) assets to be held and used, (2) assets to be disposed of other than by sale, and (3) assets to be disposed of by sale. As the first part of this section will focus on the impairment process for long-lived assets, the most applicable category is long-lived assets to be held and used. First, indicators to test for impairment will be discussed. The next part will consider the level at which testing is performed. Following these parts are discussions on measurement, allocation, and disclosure of an impairment loss. Through consideration and examination of these components, along with an overview of SFAS No. 142, the impairment process can be better understood and applied to the conceptual framework of accounting.

Indicators for Impairment Testing

For long-lived assets to be held and used, impairment is defined as the condition that exists when the carrying amount of a long-lived asset or asset group exceeds its fair value (FASB 2001b, Paragraph 7). While an impairment test is necessary when it is probable for any reason that the carrying amount may exceed fair value, certain circumstances or indicators suggest that carrying amount may not be recoverable. Listed in SFAS No. 144, Paragraph 8 (FASB 2001b) are the following indicators that an asset or asset group may be impaired:

- a. A significant decrease in the market price of a long-lived asset (asset group),
- b. A significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition,
- c.. A significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an adverse action or assessment by a regulator,

- d. An accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset (asset group),
- e. A current-period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group), or
- f. A current expectation that, more likely than not, a long-lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life.

Any of the above circumstances suggest that the asset (asset group) may not be at the value it was once identified at, and the company may have an impairment loss. Moreover, these indicators require that an asset or asset group be tested for recoverability. According to Reinstein and Lander (2004, 401), these provisions suggest that there is a significant chance (greater than 50% probability) a company will dispose of the asset before the end of its previously estimated remaining useful life.

Level of Testing

Prior to testing an asset or asset group for impairment, the lowest level at which cash flows can be measured must be determined. As discussed in Paragraph 10 of SFAS No. 144 (FASB 2001b), assets are first grouped by identifiable cash flows that are largely independent of the cash flows of other assets and liabilities. Impairment testing is then completed at this level.

In estimating future cash flows, the useful life must be determined for the asset or asset group. According to Paragraph 18 of SFAS No. 144 (FASB 2001b), this remaining useful life of an asset group is based on the remaining useful life of the primary asset of the group. The primary asset is defined as the tangible asset being depreciated or intangible asset being amortized that is the most significant component asset from which the asset group derives its cash-flow-generating capacity. If the primary asset is not the asset of the group with the longest remaining

useful life, estimates of future cash flows for the group should assume the sale of the group at the end of the remaining useful life of the primary asset.

Recoverability / Impairment Testing and Allocation

The first step in the test for long-lived asset recoverability is comparing undiscounted future cash flows to the carrying value of the asset or asset group. As discussed, the cash flow estimates should take into account the remaining useful life of the assets in question and should reflect their existing service potential. Further, the undiscounted cash flows may not include the future capital expenditures and related cash returns that could result if the asset is altered to do a different job (FASB 2001b, Paragraphs 16-21).

If the first step yields a carrying amount in excess of the total estimated undiscounted cash flows, then step two requires a comparison between the carrying amount and the fair value of the asset. If the carrying amount does not exceed the total estimated undiscounted cash flows, however, then impairment will not be recorded.

In step two, the undiscounted cash flows may NOT be used to measure fair value. Rather, the fair value of an asset, defined in Paragraph 22 of SFAS No. 144 (FASB 2001b) as, "the amount at which the asset could be bought or sold in a current transaction between willing parties other than in a forced or liquidation sale," must be used. The fair value, as discussed later in greater detail, may be a quoted market price, the price for similar assets, or determined with another valuation technique. SFAS No. 144 suggests that when estimating fair value for an asset or asset group, present value of future cash flows is often the best available valuation technique (FASB 2001b, Paragraph 23). The impairment loss is then measured as the difference between the carrying amount and the fair value.

Once the impairment loss of long-lived assets is determined, this amount is allocated to the assets in the asset group based on their relative carrying values. No individual asset, however, may be written down below its fair value (FASB 2001b, Paragraph 14).

Presentation and Disclosure

A recognized impairment loss must be disclosed in the income statement and included in net income from continuing operations before income taxes. SFAS No. 144 provides four main required disclosures including (FASB 2001b, Paragraph 26): (a) a description of the long-lived asset or asset group that is impaired and the facts and circumstances leading to the impairment (b) the amount of the impairment loss or the caption for such a loss (if they are not separately presented on the face of the income statement or statement of activities) (c) the method or methods of determining fair value and (d) if applicable, the segment in which the long-lived asset (or asset group) is reported.

OVERVIEW OF STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 142

SFAS No. 142 covers accounting for intangible assets, including goodwill. The following overview of this standard will first consider the initial recognition of intangible assets, leading to a discussion of identifiable intangible assets classified by determination of useful life. Finally, a synopsis of goodwill and goodwill impairment is provided.

Initial Recognition and Useful Life

An intangible asset that is acquired individually or with a group is initially recorded at fair value. Further, if a group of assets is acquired in a transaction other than a business combination, the cost of the group is allocated to the assets based on their relative fair values (FASB 2001a, Paragraph 9).

The accounting for an intangible asset is based on useful life, or the period over which the asset is expected to directly or indirectly contribute to the future cash flows of an entity. If an intangible asset has a finite useful life, it must be amortized. If an intangible asset has an indefinite life, it is not amortized. An intangible asset is considered indefinite when no legal, regulatory, contractual, competitive, economic, or other factors limit the useful life of the intangible asset to the reporting entity. However, the term indefinite does not mean infinite, and if the useful life for an intangible asset is determined subsequent to its initial classification, the intangible asset must be reclassified as having a finite life, and amortized accordingly (FASB 2001a, Paragraphs 11-14).

Limited Life Intangibles

For intangibles with a definite life, amortization over the useful life is required. The life of the asset should be based on the period of expected use and other applicable factors, such as legal or regulatory restrictions. SFAS No. 142 requires that the remaining useful life of an asset be re-evaluated in each reporting period, and that amortization should reflect any change that may occur (FASB 2001a, Paragraphs 12-14).

With a specified useful life, the rules and concepts behind the impairment of long-lived assets also apply to limited-life intangibles. All limited-life intangibles must be reviewed for impairment whenever events or changes in circumstances suggest that the carrying amount of the assets may not be recoverable. In testing for recoverability, the expected undiscounted future cash flows are compared to the carrying amount of the asset. If the sum of the future cash flows is less than the carrying amount, an impairment loss must be recognized. The impairment loss is the difference between the fair value and the carrying value (FASB 2001a, Paragraph 14).

An example of such an intangible asset would be a patent that has provided less income than expected. When the undiscounted future cash flows are significantly less than the carrying amount, impairment exists and fair value must be determined. A loss on impairment can then be recorded for the patent or other limited life intangible. As with all impairment losses, however, once the impairment loss is recorded and recognized, there is no allowable recovery of the loss.

Indefinite Life Intangibles

Unlike limited-life intangibles, indefinite-life intangibles are not amortized. Each reporting period, indefinite-life intangibles must be evaluated to determine whether events and circumstances continue to support an indefinite useful life. If at any time the intangible asset is deemed to have a finite life, the asset is amortized over its estimated remaining useful life and the rules for limited life intangibles apply (FASB 2001a, Paragraph 16).

If the asset continues to have an indefinite life, however, it must be tested for impairment on an annual basis, or more frequently if circumstances suggest the asset may be impaired. The recoverability test is evidently not used in measuring indefinite life intangibles' cash flows due to the fact no time period can be measured for the "future." Rather, the fair value test is used to compare the fair value of the asset to its carrying amount. If the carrying amount exceeds fair value, the asset

must be written down to its fair value and an impairment loss must be recorded (FASB 2001a, Paragraphs 16-17).

Impairment of Goodwill

Goodwill has its own set of impairment rules because it is dependent on the fair values of the other assets and liabilities in a company or reporting unit for which it is being measured. Initially, goodwill is internally developed by a company and is based on factors such as a company's quality, reputation, human resources, advantageous geographical location, intellectual capital, high employee involvement, and good ideas. While this internally developed goodwill is not recorded, purchased goodwill may be recorded.

When a company is acquired, there is often a difference between the fair market value of the identifiable net assets and the fair value or purchase price. When a comparison is made between these amounts, the residual amount is recorded as goodwill.

For many years, goodwill was amortized on a straight-line basis over a period not to exceed 40 years. SFAS No. 142 eliminated the amortization of goodwill, however, due to the idea that goodwill can be replenished, increased or potentially altered over time. The standard suggests that amortization of goodwill does not necessarily reflect the economic change of the asset's value. In place of amortization, a testing for impairment must be completed on an annual basis to re-evaluate the value of goodwill (FASB 2001a, pages 6-8). To understand the impairment process for goodwill, it is necessary to consider and examine several components including the circumstances to test for goodwill impairment, the level of testing, the measurement of the loss, and disclosure.

Indicators for Goodwill Impairment Testing

Impairment of goodwill is performed at least annually and is a two-step process.

Although the review is required regardless of a company's condition, there are several events or changes in circumstances that indicate goodwill may be impaired. If circumstances indicate the necessity for an impairment test in the middle of a year,

the test should be done as well. Paragraph 28 of SFAS No. 142 (FASB 2001a) includes the following circumstances that indicate goodwill may be impaired:

- “
- a. A significant adverse change in legal factors or in the business climate,
 - b. An adverse action or assessment by a regulator,
 - c. Unanticipated competition,
 - d. A loss of key personnel,
 - e. A more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of,
 - f. The testing for recoverability under Statement 121 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.”

In addition to these circumstances, Paragraph 39 of SFAS No. 142 (FASB 2001a) requires an impairment test after a portion of goodwill has been allocated to a business to be disposed of.

Level of Testing

Impairment testing is done annually at the reporting unit level for goodwill. According to SFAS No. 142, a reporting unit is an operating segment or one level below an operating segment, referred to as a component. In either case, a reporting unit must be a component of an entity for which discrete financial information is available (FASB 2001a, Paragraph 30). Further defined in Paragraph 10 of SFAS 131 (FASB 1997), an operating segment, “is a component of an enterprise that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same enterprise) and whose operating results are regularly reviewed by the enterprise’s

chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance.”

The distinction of a reporting unit or an operating segment is very important in determining if goodwill is impaired. Goodwill must be clearly identified as part of a particular reporting unit or part of the larger, combined enterprise.

Impairment Test

The two step impairment testing process includes (1) an initial check for impairment, followed by (2) a measure of the actual loss if the goodwill is determined to be impaired.

The initial check for impairment compares the fair value of the reporting unit with its book value, including goodwill. Once the fair value is determined, it is compared with the unit's carrying amount, including goodwill. If the fair value is greater than the book value, it is evident that no impairment exists and the process does not need to go further. If the fair value is less than the carrying amount, however, goodwill may be impaired and an impairment loss may need to be measured (FASB 2001a, Paragraph 19).

The second step of the goodwill impairment test compares the implied fair value of the goodwill with the carrying amount of goodwill for the reporting unit. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value assigned to all its assets and liabilities. A write-down of goodwill and an impairment loss must then be recognized as the amount by which the implied fair value of goodwill is less than its carrying value (FASB 2001a, Paragraph 20).

One way to measure the fair value of the reporting unit is to use the fair value of the unit, or the amount at which the unit as a whole could be bought or sold in a current transaction. When this information can not be determined, one alternative method of valuation, known as market capitalization, multiplies the market price of the common stock by the number of shares outstanding. If the unit has no stock, or this method does not work with the enterprise, other means may be necessary to estimate the fair

value of goodwill, such as the present value of discounted future cash flows. In any case, a model must be established in an enterprise to measure the fair value of each reporting unit (FASB 2001a, Paragraph 23).

Disclosure

An impairment loss is shown on the income statement as part of continuing operations unless it is associated with a discontinued operation. In the latter case, the impairment loss should be included within the results of discontinued operations.

For a goodwill impairment loss, a few items must be disclosed in the notes to the financial statements including (FASB 2001a, Paragraphs 43 and 47): (1) a description of the facts and circumstances leading to the impairment and (2) the amount of the impairment loss and the method of determining the fair value of the associated reporting unit. Further, if a recognized impairment loss has not been finalized, the reason for this must also be disclosed, along with the estimate. In subsequent periods, the nature and amount of any significant adjustments to this initial estimate of the impairment loss must also be disclosed.

CONCEPTUAL EVALUATION

With an understanding of SFAS No. 144 and SFAS No. 142, a conceptual evaluation of the impairment standards will now be done. This evaluation will include an overview of key components of the Statement of Financial Accounting Concepts (SFAC) No. 2 (FASB 1980) and how the impairment standards relate to those concepts. Components that will be examined include reliability (verifiability, representational faithfulness, conservatism), historical cost, relevance (feedback value and predictive value), fair value, and the cost-benefit trade off of implementing SFAS No. 144 and SFAS No. 142. Throughout this conceptual evaluation, several controversial issues will be considered that relate to impairment testing including: the steps in testing for both long-lived assets and goodwill impairment, fair value measurement and ratio analysis as a practical use of long lived-assets, and the major question: do the benefits of SFAS No.144 and No. 142 really outweigh the costs?

Reliability

The first component of the conceptual framework of accounting to be discussed is reliability. According to SFAC No. 2 page 10, reliability is, “the quality of financial information that assures that information is reasonably free from error and bias and faithfully represents what it purports to represent” (FASB 1980). In considering asset impairment and write-downs, reliability ensures that long-lived assets and goodwill are not overstated to external users of the financial information. Due to the fact that assets can only be written-down and not up, however, the reliability of a nonreversible write down (and the new book value of assets) is a controversial topic. Within the context of reliability, several characteristics of, or closely related to, reliability, will be discussed including verifiability, representational faithfulness, and conservatism. Additionally, before presenting these components the next section will open with the most reliable measure of any asset – historical cost.

Historical Cost

Historical cost, the original book value assigned to assets, is the most reliable measure of value. For long-lived assets, such as property, plant and equipment, historical cost is the amount of cash (or a cash equivalent) paid to acquire an asset.

This value is commonly adjusted after acquisition for amortization, depreciation, or other allocations

(FASB 1984, Paragraph 67a). For goodwill, it is the residual of the purchase price minus the net assets. Historical cost is important to reliability because it represents the most representationally faithful measure available for financial reporting. The historical cost, or original book value assigned to assets, is, in many cases, the only measure that can be verified.

Verifiability

Verifiability, an important characteristic of reliability, is the ability through consensus among measurers to ensure that information represents what it purports to represent. Verifiability also suggests that the chosen method of measurement has been used without error or bias. Thus, for financial information to be reliable and verifiable, two or more separate measurers should be able to obtain the same results using the same methods of measurement (FASB 1980, Paragraph 81).

In the case of asset impairment, fair value is often based on present value computations. As a result, assumptions may easily change from one measurer to another. Even honest measurers may get different results from applying the same measurement method when the method involves predicting future events. To obtain a present value, different assumptions about appropriate discount rates can compromise the verifiability of an impairment loss. Additionally, the net yearly cash flows must be estimated along with future selling prices for the asset group at the end of the primary asset's useful life. Estimated fair value may vary depending on the net cash flows used and the discount rate applied. When the best estimate for cash flows and the exact same discount rate can be agreed on by measurers, the measurement may be replicated with the same results. In measuring asset impairment, however, the likelihood of discrepancies in rates and cash flows is high among alternative measurers.

Representational Faithfulness

In addition to verifiability, representational faithfulness is a characteristic of reliable financial information. Although verifiability and representational faithfulness are similar, verification of accounting information does not guarantee that the information has a high degree of representational faithfulness, and a measure with a high degree of verifiability is not necessarily relevant to the decision for which it is intended to be useful. While there may be different degrees of representational faithfulness, it suggests a correspondence or agreement between a measure or description and the phenomenon that it purports to represent (FASB 1980, Paragraphs 82 and 89).

In considering representational faithfulness with asset impairment, the measure of fair value purports to represent the value of an asset (asset group). While historical cost is clearly the most representational faithful measure, the representational faithfulness in using present value techniques, purporting to represent fair value, is a debatable topic. With all of the assumptions involved in computing present value, including determining the best yearly cash flow estimates and discount rates, the reliability and representational faithfulness in using the present value technique is often questionable.

Additionally, in considering both representational faithfulness and verifiability, the issue of reporting units for goodwill testing comes into play. Due to the lack of specificity in the definition of reporting units, companies may have a great deal of flexibility in determining reporting units and the assets and liabilities assigned to those units. As a result, management may be able to choose allocations that will benefit the company or hide an impairment loss, without considering the principles of reliability, verifiability, and representational faithfulness.

Conservatism

Along with verifiability and representational faithfulness, conservatism is a principle that is applied to financial reporting. Conservatism means prudence in financial accounting and reporting because business and economic activities are surrounded by uncertainty. Conservatism must be considered when assets and liabilities are measured with uncertainty. In such circumstances, the historically-supported

conservative approach favors possible errors in the direction of an understatement rather than an overstatement of net income and net assets (FASB 1980, Paragraph 171). When determining the impairment of long-lived assets and goodwill, a write down will state the assets at their conservative values. In contrast, if assets are maintained at a book value that exceeds fair value, this is inconsistent with the principles of conservatism.

In line with the conservatism principle is the idea that a write-down can not be recovered or reversed. In other words, the impairment for long-lived assets that will be held and used is a “one way street” and no subsequent change in conditions or alternative valuation can reverse a write-down. Paragraph 15 of SFAS No. 144 asserts this rule for long-lived asset impairment and Paragraph 15 of SFAS No. 142 contains a similar provision that prevents the recovery of a goodwill impairment loss. Additionally, no provision exists in either SFAS No. 142 or SFAS No. 144 to allow for a “write-up” of goodwill or long-lived assets which have increased in value.

In making cash flow estimates for present value computations and other valuation measures, conservatism is a very significant guideline, suggesting that management avoid opportunistic behavior. Ross L. Watts (2003) addresses the issue and importance of conservatism, stating that, “Discarding the benefits of conservatism and transaction-based accounting in an attempt to create accounting “valuations” based on managers’ estimates of future cash flows is a serious error that may prove fatal to the FASB. Those estimates will incorporate all the problems conservatism seeks to address.” Watts further notes that the only way to improve conservatism and financial reporting is to provide, “verifiable conservative information that market participants can use in their own valuation and as calibration for their own and others’ unverifiable information.” (Watts 2003, 207). While the subjectivity of management valuations and cash flows is certainly a controversial issue, there is difficulty in providing guidance that will ensure the reliability of conservative accounting. The issue of conservatism and this subjectivity leads directly to the topic of relevance, and the idea that relevant financial information may not always be reliable.

Relevance

For financial information to be relevant, it must be capable of making a difference in a decision made by investors, creditors, and others for investment, credit, and similar decisions. Relevant information may also help users confirm or correct expectations helping them form predictions about the outcomes of past, present and future events (FASB 1980, Paragraph 47). In considering relevance, feedback value and predictive value are important characteristics that will be discussed. Additionally, as fair value is often considered the most relevant measure for investors when it comes to decision making, this section will consider a brief overview of some important concepts and components of SFAS No. 157: Fair Value Measurements (FASB 2006).

Feedback Value and Predictive Value

According to SFAC No. 2 page 10, feedback value is, “the quality of information that enables users to substantiate or confirm prior expectations” and predictive value is, “the quality of information that helps users increase the likelihood of correctly forecasting the outcome of past or present events” (FASB 1980). Together, these qualities make a difference to decisions by improving decision makers’ capability to predict the results of similar future actions, based on their knowledge of past events. It is important to note that predictive value is not value directly as a prediction but value as an input into the predictive process (FASB 1980, Paragraph 51).

As new methods of gathering information and new measures of valuation have developed, they often act to increase the feedback value and predictive value of information. When considering cash flows in a present value computation, the predictions made about cash flows can directly affect the subject, or the fair value of the asset in question. As a result, these cash flow predictions act as an input to the process and must be considered highly relevant to the outcome of the model (FASB 1980, Paragraphs 53).

Additionally, the impairment of goodwill has predictive value as it signals the loss of what gave rise to the goodwill in the first place. A goodwill write-down provides information on what has happened to a company along with predictive value as to the potential for loss of future excess earning capacity.

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While feedback value and predictive value are highly important to relevant decision making, the subjectivity of the financial information being used, such as cash flow estimates, directly affects these qualities. Depending on the model used and how the cash flows are measured, different companies have different means of obtaining a present value (fair value). As a result, the quality of the feedback value and the predictive value, especially when compared among companies using different models, may be lacking.

FAIR VALUE AND STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 157

Prior to and subsequent to the release of Concepts Statement No. 7: Using Cash Flow Information and Present Value in Accounting Measurements in February of 2000, there existed a great deal of controversy surrounding the issue of fair value. While exposure drafts and critiques touched on this controversy and the significance of measuring fair value, it was not until September of 2006 that SFAS No. 157 was released to clarify and codify some of the long-held questions surrounding fair value. Even with some questions answered, however, the different ways to measure fair value continue to bring debate to the topic. To understand the most recent fair value guidelines, some brief highlights from the standard will be provided in the remainder of this section.

According to SFAS No. 157 Paragraph 5, fair value is defined as “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 2006). Under SFAS No. 157, fair value is considered an “exit price” that can apply to assets and liabilities alone or as a group, reporting unit, or business. Three valuation techniques discussed in SFAS No. 157 include the market approach, the income approach, and the cost approach. Under the market approach, prices and information are generated from market transactions. Under the income approach, prices are generated by converting amounts to single discounted present value or by an alternative valuation model. According to the income approach, future cash flows should be converted to a single present discounted amount, based on the market expectations about those future amounts. The last valuation technique, the cost approach, uses current replacement cost (FASB 2006, Paragraph 18).

SFAS No. 157 also discusses inputs, or assumptions that market participants would use in pricing an asset or liability. These inputs may be observable or unobservable and include assumptions about risk, such as the risk inherent in a particular valuation technique or inputs used to measure fair value. Observable inputs reflect market participants' assumptions about pricing based on market data. These inputs are

obtained from sources independent of the reporting entity. In contrast, unobservable inputs reflect the entity's own assumptions about assumptions market participants would use in pricing the asset or liability. Unobservable inputs are developed based on the best information available in the circumstances (FASB 2006, Paragraph 21).

The three inputs in the fair value hierarchy are Level 1, Level 2 and Level 3. These levels reflect the assumptions or inputs to a model and not the valuation techniques themselves. Level 1 inputs are exact prices or the quoted prices in active markets for the same assets and liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or quoted prices for identical assets and liabilities in inactive markets. Both level 1 and level 2 inputs imply an observable nature. In contrast, Level 3 inputs are unobservable and used to measure fair value to the extent observable inputs are unavailable. As mentioned prior, unobservable inputs should reflect the reporting entity's own assumptions that market participants would use in pricing, including assumptions about risk. While level 3 inputs should be developed on the best information available, which may be an entity's own data, such data and assumptions should be adjusted if information is readily available that suggests market participants would use different assumptions (FASB 2006, Paragraphs 24-30).

In considering asset impairment and the present value technique in measuring fair value for both goodwill impairment and long-lived assets, the income approach to valuation is commonly used. Present value techniques utilize unobservable inputs at the level 3 input ranking. As a result, the inputs may be very subjective as they may vary depending on the valuation model used and the assumptions of management incorporated in cash flow choice.

An example of the subjectivity of fair value is discussed by Robert Haldeman (2006) in comparing Enron's bookkeeping activities to the subjectivity of the level 3 input guidance. Haldeman suggests that Enron's extensive use of "mark-to-market" accounting was really more like "mark-to-estimate" accounting, falling under the income valuation approach for valuing level 3 inputs. Although Enron hid losses

through special-purpose entities (SPEs), Haldeman suggests that, "Not only did fair value accounting probably contribute more to Enron's collapse than SPEs did, but it was partially responsible for Enron's decision to use them." (Haldeman 2006, 8). As a result, Haldeman advises investors to be careful of the potential risks when the new accounting theory is applied, especially by aggressive corporate managers.

Relevance vs. Reliability

The Enron example suggests that the adoption of fair value accounting, especially under level 3, generates risks for users of the financial information. The Enron case suggests that fair value accounting, although it may be more relevant in circumstances, leaves room for bias, subjectivity, and earnings management. As a result, it is important to examine the relevance and reliability trade off, along with some of the major controversies regarding fair value surrounding SFAS No. 144 and SFAS No. 142.

The reliability of financial information is questionable when computing fair value by present value techniques, considering the estimated yearly cash flows that must be determined, along with the discount rates and risk factors. With the exception of assets traded in an active market, fair value estimates are generally subjective. Nevertheless, fair value is relevant to users of financial information as it has the capacity to make a difference in decision making. The trade-off, therefore, is that reporting of long-lived assets and goodwill at fair value is relevant information but in most cases it does not have the same level of reliability as historical cost. Thus, the overall reliability of the steps in impairment testing must be considered, along with the allocation of an impairment loss for long-lived assets. Discussed in the next few sections will be the first step in long-lived asset impairment using undiscounted cash flows, the subjectivity of using present value computations, valuing reporting units, and the loss allocation for long-lived assets.

Undiscounted Cash Flows

A controversial issue regarding the reliability and even the relevance of financial information is the validity of the undiscounted cash flow step in impairment testing of long-lived assets and intangible assets with a finite life. As discussed in the initial

overviews of SFAS No. 144 and No. 142, if circumstances suggest impairment testing should be performed for a long-lived asset (or asset group), the book value of the asset must be compared to the undiscounted future cash flows. If the undiscounted cash flows are less than the book value, then the next step compares fair value to the book value. A write-down and an impairment loss will be recorded accordingly.

The problem with the undiscounted cash flow step is that if undiscounted cash flows are not less than book value, no impairment is recorded. Thus, if fair value is actually less than book value, but undiscounted cash flows do not result in impairment testing, the write-down will not be recorded. Not only does this violate the principle of reliability and conservatism, as an asset (asset group) may have decreased in value, but it also violates relevance as there is no benefit to an investor relying on that value to make a decision. Further, if in a future period the book value does exceed undiscounted cash flows, then any decisions made according to the original book value quickly become irrelevant. Depending on the estimates used to determine the undiscounted cash flows, the inputs themselves may also be unreliable.

Present Value Computations and Accounting Units

Another controversial issue considers the discounted present value technique, often used to obtain fair value in both SFAS No. 144 and SFAS No. 142. To illustrate the subjectivity of this technique, one could consider equipment that has been used for several years in a factory to create gasoline-powered vehicles. As the times change, the company that manufactures this vehicle decides to switch to manufacturing alternative-fuel-powered vehicles, and does so by obtaining new factory equipment for a new plant.

If the market for gasoline-powered cars decreases substantially, an impairment test will need to be performed for the equipment that produces the gasoline-powered vehicles if the company continues to produce and sell them. Due to the fact that the equipment is of an older variety, observable inputs are likely not available for fair value computations, most likely using present value techniques. Rather,

unobservable inputs must be used, based on management assumptions about cash flows, discount rates, and risks. Even with a valuation expert, there is a great deal of subjectivity in determining appropriate discount rates and cash flows, especially when the useful life of the assets or primary asset and the cash inflows and outflows are uncertain. As a result, even with a great valuation model and the participation of a valuation expert, the calculation of fair value for the asset or asset group is highly subjective.

In determining fair value using present value techniques for goodwill impairment, consider the same example. If a company acquires another entity to help expand the alternative fuel source vehicle production, goodwill may be recorded as a result of an acquired company's progress with alternative technology. Say the acquired entity had a few alternative-fuel-based plants and one gasoline-based plant. After acquisition, the company as a whole decides to improve the acquired gasoline-based plant due to continuing demand for the vehicles. A large sum of money goes into retooling the plant and then changes in the market indicate the cars will not sell as expected. In this situation, an asset impairment test must be performed, along with a goodwill impairment test. Due to the discrete financial information available for each entity, the acquirer and the acquired entity each act as a reporting unit for the company. A goodwill impairment test must be performed for the acquired company, due to the market conditions that violate prior expectations and may cause a decrease in value for the reporting unit.

In this situation, the value of the reporting unit as a whole must be compared to its book value, and if the fair value is less, goodwill impairment exists. The fair value must then be compared to the net identifiable assets, and a new value for goodwill must be determined. As discussed prior, the determination of the fair value of a reporting unit is very subjective and often relies on present value techniques for valuation.

Eric Lewis, Jeffrey Lippit, and Nicholas Mastracchio (2001) note the feared abuses of the reporting unit requirements under SFAS No. 142. Due to the fact that only

identified assets are included in the asset base for determining the fair value of a reporting unit, Lewis, Lippit and Mastacchio suggest that, "Any unidentified assets that contribute to market value will be captured as a portion of the value ascribed to goodwill...Because their income streams are homogenized in the overall performance of the reporting unit, it will be very difficult to distinguish the separate value of acquired goodwill from this collection of assets, and impossible to separate its value from internally developed goodwill." (Lewis et al. 2001, 27).

Some unidentified assets whose capitalization is prohibited include advertising, research and development, and gain contingencies. As a result, companies may place acquired goodwill into existing or acquired reporting units that have little or none, rather than those that would be most likely to benefit. Lewis, Lippit and Mastraccio suggest that through this act, "unrecognized goodwill would protect acquired goodwill from accounting impairment because it would increase the expected present value of future cash flows without increasing the market value of recorded assets." Thus, if management plans it out correctly, impairment may be avoidable.

Although SFAS No. 157 asserts that cash flow estimates must be reasonable and utilize all available evidence, a vast range of estimates and methods could be acceptable under the guidance of unobservable and level 3 input categories. Even with well documented methods, calculating goodwill impairment may be at the discretion of management, depending on the assumptions and allocation involved. In the use of present value techniques and reporting unit determinations, the reliability and the relevance of the information, the assumptions, and overall results may be questioned.

Allocating and Impairment Loss

An additional concern of SFAS No. 144 is the allocation of the impairment write-down to assets in an asset group. If within an asset group, certain assets have decreased in value and others have increased, the overall allocation may be skewed. Consider an example where impairment exists for a group of assets, including land and

equipment, and the loss must be allocated to the group. If fair value is greater than book for an individual asset, for example, the land, no write up is allowed and the book value of the land is not adjusted. In turn, the value of the impaired assets in the asset group will be overstated.

To illustrate, consider an example where land is on the books for \$100 (in thousands) and worth \$150 and the total equipment is on the books for \$210 and worth \$60. If these assets are grouped together then total fair value of the group is \$210 and book value is \$310. Because the write up of the land is unallowable, the \$100 difference will be used to write down the equipment. However, the value of the equipment actually decreased by \$150, so where is the other \$50? The \$50 is actually concealed in the allocation, as the increase in value of the land offset the other \$50 decrease in the value of the assets. Thus, \$100 will go to the equipment group and it will be valued at \$110 instead of \$60.

As a result, under circumstances where some assets in a group increase in value while others decrease in value (in an asset group), the characteristics of both relevance and reliability are violated. With the historical cost or book value of the equipment changed to a value that is supposed to help users, the value is neither reliable nor relevant to decision making if it is inaccurate. If the goal is to measure fair value, grouping assets that have decreased in value with those that have increased and considering them as a whole may not actually result in individual assets being stated at fair value.

Cost-Benefit

The controversies behind impairment testing necessitate a discussion regarding the overall costs and benefits associated with SFAS No. 144, and SFAS No. 142.

Through this discussion, the tangible and intangible costs of impairment testing will be considered along with the potential benefits. Additionally, this section will include an examination of existing companies that have recorded impairment losses and will conclude with a summary of an interview with EMC's finance manager regarding the costs and benefits of impairment testing.

The cost-benefit principle suggests that the benefits of information derived from an accounting system must be equal to or greater than the system's cost. In implementing impairment testing on an annual basis for goodwill or when necessary for long-lived assets, testing can be very costly. According to Tim Reason (2003), "Hiring an outside valuation expert to perform purchase-price allocation can cost a public company anywhere from \$50,000 to \$500,000, depending on the size of the deal." Reason further notes that business reorganizations and any restructuring will trigger an automatic goodwill impairment test under SFAS No. 142 (Reason 2003, 32). Aside from the large monetary costs involved, impairment testing also requires a great deal of time, effort and employee attention. Enterprises with multiple reporting units have significant costs in implementing goodwill testing on an annual basis. Further, impairment testing of long-lived assets may generate significant costs and unexpected losses.

The supposed benefit of a write-down is that it presents users of the financial statements with useful, relevant information, consistent with FASB's Statement of Financial Accounting Concepts No. 1. As suggested in the SFAC No. 1, financial reporting should provide information about the economic resources of an enterprise and the effects of transactions, events, and circumstances that change its resources (FASB 1978, Page 5). When long-lived assets become impaired, the resources of a company have changed in value. Thus, it is important to inform external users of the change in value to ensure that they make rational decisions. The new fair value stated on the balance sheet, however, may not be as relevant and verifiable as expected due to subjective fair value calculations and allocations. Additionally, to the extent that write-downs provide value, write-ups, which are not allowed, would provide useful information as well. As a result, the new fair values may or may not help in rational decision making, depending on the measures involved, the reliability of management, and the models used.

In applying the cost-benefit constraint, impairment testing is very controversial. The apparent benefit of what may be better and more relevant information must be weighed against the monetary costs, the subjectivity of valuation, and the fact that no

asset value can be recovered, even if it increases in value subsequent to a write down. Further, in determining and valuing these estimates, the expenses of valuation can accumulate and in many circumstances, the benefits come at extreme costs. In considering the idea of conservatism and the assumption that the financial information is truly relevant and useful to external users, some believe that the benefits of impairment testing outweigh the costs. Others, however, believe that a change in value that is measured and disclosed with the subjectivity of current impairment guidelines may not truly reflect the economic resources that the firm is purporting to represent. As a result, it is important to examine the use of financial information in valuation. While the costs are supposed to yield better, more relevant information, the next consideration is the extent to which the information is even really used. Thus, in the following section some of the ratios and valuation methods utilized by external users will be examined.

Ratios / Valuation Measures

One way financial information is used is in ratios. In looking at some of the primary ratios used by investors, however, it is clear that long-lived assets are seldom used. Some common ratios that are used by investment analysts and have no consideration for long-lived assets include: price earnings (PE), sales/shares price, price to earnings growth (PEG), price to book value, and working capital.

In the price earnings ratio the price of stock is divided by the earnings per share and in sales/shares price, the price of stock is made relevant to sales. Neither of these commonly used methods to value and compare companies include or even consider the use of long-lived assets. PEG, price to earnings growth, is the price of stock relative to the growth in earnings per share. Once again, this ratio does not make use of long-lived assets.

Price to book value is the price of a share of stock to the book value of the company per share. While the book value is total assets minus total liabilities, this ratio has limitations due to the fact that book value is based partly on historical cost and partly

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on fair value. Additionally, with a frequently used measure like working capital, or current assets minus current liabilities, no long-term assets are used.

While some ratios may consider long-lived assets, the majority used in valuing a company and in making decisions do not. Thus, in many cases, the costs that go into impairment testing may not even generate useful results. Further, if a ratio is based on assets and assets have increased considerably in value, the ratio does not seem valid if the assets are shown at \$5 but are really worth \$30. An example may be considered by comparing fictional entities, Company A and Company B. Say Company A's value was appropriate due to the fact that assets and liabilities are accurately valued on the books. Company B's assets, however, are worth significantly more as they have gone up in value. Due to the fact that these assets can not be written-up, however, investors and external users do not have this information. In this case, a ratio such as price-to-book value may not be accurate due to the fact that the ratio should be lower.

Although fair value in ratios would be more meaningful, no write-ups are allowed. Thus, assets that are written down may be more relevant and may correctly reflect assets value, but assets left at book value may not. In the case of computing some ratios, a write-up would be just as significant to users of the financial information as would a write-down. Further, many people who analyze a company and determine if it should be purchased may be looking at the ratios discussed, which take little or no consideration of long-term assets.

Enterprise Discounted Cash Flow Model

In analyzing and valuing a company, there are several valuation models based on discounted cash flows (DCF). Two prominent models are enterprise discounted cash flow and discounted economic profit. While these two models often provide similar or sometimes identical results and complementary benefits of interpretation when applied correctly, other models may not. Additional valuation models include adjusted present value, capital cash flow and equity cash flow. Although all of these models differ in means of computation, none of them truly utilize long-lived assets in

measurement. To illustrate this point, consider the enterprise discounted cash flow model, the favorite of many practitioners and academics due to the fact that it relies solely on the inflows and outflows of cash in a company (Koller et al. 2005, 103).

The enterprise discounted cash flow model enables the user to value individual projects, business units, and an entire company with consistent methodology. The model primarily involves free cash flows and capital expenditures, with cash flows discounted to present value using the weighted average cost of capital (Koller et al. 2005, 106). While capital expenditures may include how much money goes in and out in one year to acquire fixed assets, no input in the model considers the value of current long-lived assets. Thus, investors using this model are not concerned with an impairment charge as it will have no effect on the end result.

If investment analysts are using such ratios as discussed previously and discounted cash flows that do not even rely on asset values, it is hard to determine if there is value and benefit from the information generated in impairment testing. Further, having a write down and not a write up discredits any method that does consider long-lived assets. As a result, the costs of impairment testing seem to outweigh the benefits from the standpoint of utilizing the information. In the next section, the impact SFAS No. 142 and No. 144 have had on companies, in terms of recording impairments and testing for impairment is discussed.

REAL APPLICATION – BOEING, FORD, TEXTRON AND EMC

In examining companies that have recorded an impairment loss, the conceptual characteristic of comparability must be considered. Even if companies are in similar industries and must disclose their fair value mechanisms, there are different valuation methods that are used in cash flow models. In many cases, even amongst valuation experts, there is no upper hand suggesting one model is better than another. Due to the fact that each cash flow model may utilize different components, the comparability is weak among companies that have recorded impairment losses, even within the same industry. Thus, this section will objectively and individually examine impairment losses and impairment testing for each company.

Boeing

Boeing is a valuable and unique example of a company that has recorded two large impairment losses in a short period due to restructuring. Boeing recorded a \$2.4 billion goodwill impairment charge in the first quarter of 2002 when it first adopted SFAS No. 142. In January 2003, Boeing reorganized its reporting units and due to the automatic impairment test triggered by the restructuring, the company had an additional \$931 million in impairment (Reason 2003, 32). This example illustrates circumstances that initiate interim goodwill impairment testing.

Ford

Ford, an additional company that has incurred large charges, recently recorded long-lived asset impairment. In 2005, Ford updated a plan for their Jaguar/ Land Rover operating unit. Due to a projected decline in net cash flows for the operating unit, based on market projections, the long-lived assets of the operating unit had to be tested for recoverability. As a result, Ford recorded a \$1.3 billion charge for long-lived asset impairment (Ford 2006).

Ford illustrates the subjectivity involved in predicting impairment and estimating future cash flows, however, as they were primarily based on a recent declining market performance for Jaguar. In many cases, a company may anticipate a decline in future sales, but may not immediately act on the indicators. While Ford took the responsibility to estimate and record long-lived asset impairment for this particular

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operating unit, it is uncertain as to how many companies recognize clear indicators and take such initiative.

Textron

Textron recently recorded goodwill impairment losses of \$335 million in 2005. In contrast to the companies previously discussed, Textron's impairment was related to discontinued operations. Textron recorded a goodwill impairment charge related to its Fastening Systems business and then sold the business in 2006. From this measure, Textron recorded an additional \$120 million in impairment charges in the second quarter of 2006 (Textron 2005).

My Visit to EMC – A First Person Perspective

In evaluating impairments from a cost-benefit standpoint, I thought it would be beneficial to obtain the perspective from someone who actually deals with the process of impairment testing. Dan Goldstein, Finance Manager at EMC, was able to provide me with an internal perspective on the process, along with his own feedback on the lingering question... Do the costs of impairment testing exceed the benefits?

To understand the real application of statements 142 and 144, it is important to understand the company and industry. EMC, "develops and delivers flexible information infrastructures" and helps organizations "extract greater value from their information and get the most out of their information technology (IT) assets." (EMC 2005, Pg 1). The company is comprised of four operating segments or reporting units, including 1) information storage; 2) content management and archiving; 3) security; and 4) VMware. While information storage had been the predominant focus for the company, EMC has moved toward software over the recent few years. Additionally, with over 20 acquisitions in the past few years, and its recent acquisition of RSA, Inc, the company has realigned its businesses and made a move to security software.

An initial inquiry regarded the valuation of goodwill. Goldstein indicated that goodwill is very prominent in the technology industry due to the advantages of innovative products and services. While some large companies have an extensive range of

long-lived tangible assets, many in the technology sector do not. Thus, a good portion of their worth is attributable to reputation and advances in technology, and as a result it is assigned to goodwill.

In terms of allocation, Goldstein indicated that goodwill is valued as a whole at date of acquisition, and then allocated to those segments that benefit. In other words, the goodwill becomes a part of the segments that achieve synergy through the acquisition, depending on the business of the company that has been purchased. The allocation of goodwill conversation lead to a discussion regarding the level of goodwill impairment testing at EMC. The reporting unit level for EMC, or that for which components can best be grouped and discrete financial information is available, is the four operating segments.

Next, the method for measuring fair value in the goodwill impairment test was discussed. As presumed, EMC uses the discounted cash flow approach to determine fair value. Although the Financial Planning and Analysis department of EMC have cash flow information available, the cash flows must be projected far into the future and must include the necessary factors of inflation and risk. Goldstein noted the challenges of doing such a projection, especially in the fast-changing industry of technology. While certain segments or components have significant growth one year, this growth may decrease over time due to competitors' products or a change in technology that may dramatically change the success of a product or service in one of the company's segments. As a result, cash flow projections at EMC must be evaluated frequently, and are computed with conservative risk and inflation factors.

Additionally, Goldstein noted that the process is complex, due to the balance sheet allocation that must be done to determine the value of each segment. This method takes the company as a whole and allocates all balance sheet items to each segment. Further, the method and process is done only for the purpose of impairment testing.

Although Goldstein could not put a dollar figure to the cost of impairment testing for EMC, he said that people's time and effort is the biggest cost. With every impairment

test, EMC is draining resources (employees) who could be accomplishing other tasks. Fortunately for EMC, however, most of the valuation and computation can be done in house. Goldstein mentioned the importance of large companies having a handle on valuation and forecasting because of the number of acquisitions that occur. EMC actually does goodwill impairment testing on a quarterly basis, to have lead time in the event that special measures and valuations must be done. For companies that do not do in-house valuations, however, costs can be extremely high.

The final topic discussed with Goldstein was an asset impairment charge from 2003. Although the 10.5 million charge did not have a significant impact on EMC, it was due to the restructuring of the company after its acquisition of LEGATO. As with other acquisitions in the technology sector, duplicative projects can often result if the purchased firm had similar or competitive products. From acquiring LEGATO, EMC had to take an impairment charge for a software project that already existed within the company. Thus, what LEGATO built into its asset base for the project had to be written off and taken as an impairment loss.

Overall, Goldstein indicated his belief that the costs outweigh the benefits when it comes to impairment testing. Although some method of valuation must be done for goodwill, asset impairment in general does not yield the benefits that would be expected for such a costly project. Goldstein furthered this claim by confirming that the majority of valuation techniques do not consider long-lived assets. Additionally, he commented on the subjective nature of the fair value techniques involved. For goodwill, the allocation of balance sheet items to different segments, such as accounts receivable and accounts payable, can be very subjective.

Goldstein also commented on the undiscounted cash flow approach in the first step of asset impairment, suggesting that he had also questioned the validity of this approach if fair value is truly below book value. Considering the level of importance placed on impairment testing and the time and intellectual resources absorbed in the process, Goldstein stated that, "most companies are simply following a requirement and not many businesses are benefiting."

CONCLUSION

Through an overview and conceptual evaluation of SFAS No. 144 and No. 142, along with a real business application, the framework for analyzing and evaluating these standards has been established. With many controversies surrounding the impairment of goodwill and long-lived assets, the cost-benefit question still remains. With all of the costs, monetary and non-monetary, it seems all the work involved with impairments yields only marginal benefits.

The controversies lead from one to another and revolve primarily around fair value. The main controversy considers the fact that assets can be written-down but not written-up. Although the principle of conservatism has a stronghold on the write-up suggestion, the actual relevance of the asset information used by external users may be compromised if write downs are allowed but write-ups are not. Not only does the rule against write-ups degrade the relevance of the information provided, but it casts a shadow on the costs that go into a write-down, as they are one-sided and produce marginally beneficial results. Further, the supposed benefit of the relevant and reliable information may be flawed if the information is inaccurate or skewed, which may occur in measuring impairment due to the subjectivity of the measures involved.

Additionally, when the measures, models, and allocations are reasonable and verifiable, the financial users may not even be utilizing the information. Through examining common ratios used to measure a company and a popular valuation model, there is no indication that long-lived assets play a big role in valuation. When long-lived assets are used, the valuation measures may be defective due to the fact that the true fair value of assets is not displayed. Thus, the criticisms with impairment become a vicious circle, encompassing a number of controversies that revolve around guidelines and uses of both fair value and conservatism.

Additionally, although SFAS No. 144 and No. 142 may claim to support certain characteristics of valuable financial information such as conservatism and relevance, the standards discredit a number of other characteristics including reliability, verifiability, and comparability. With the relevance-reliability trade off and the cost-

benefit trade off, a happy medium must be attained to appease the conceptual controversies around SFAS No. 144 and No. 142.

In considering fair value measurement, there are several models acceptable for valuation under SFAS No. 144 and SFAS No. 142. Almost all of the mechanisms in determining present value utilize unobservable inputs that are highly subjective, allowing management to have the upper hand in determining cash flows and other potentially biased measures. Due to the high degree of management control, it is likely to assume that under certain circumstances, companies may ignore long-lived asset impairment.

Although large companies with several acquisitions, such as companies in the technology industry, may be compliant with testing for long-lived asset impairment on a regular basis, it is possible that many companies ignore, cover up or pay little attention to indicators for testing. In such situations, impairment may easily go unnoticed. Companies that do not have goodwill may also ignore long-lived asset impairment, as goodwill impairment testing often indicates (due to changes in market conditions) the need for long-lived asset testing. Further, while goodwill impairment requires an annual test, reporting unit measurement and allocation is still done in a way that allows for subjectivity and possible earnings management.

To appease the criticisms, a number of measures must be taken to correct the discrepancies in guidance and valuation. While no corrective measures are certain in the near future, there are some suggestions that would improve the impairment process and reduce subjectivity. One suggestion is that every firm should be required to use outside valuation experts. As in current practice, if firms gather cash flow information on their own, valuation experts should consider the information independently and apply it to a model accordingly. A common model is another suggestion, referring to a model that should be established and required by every company conducting impairment testing. Due to the fact that variations in levels and observable and unobservable inputs create heavy subjectivity in valuing a company through present value, it would be beneficial to find a model that would be acceptable

to both companies and valuation experts. Even though characteristics differ amongst companies, a model that could be adapted to different companies should be established and used as the ultimate measure in determining fair value.

Aside from these suggestions, a number of controversies remain regarding the subjectivity of cash flows, allocations, and the ability to avoid impairment if a firm desires. Although these may never be resolved, it is certain that the move away from reliable, verifiable information, such as historical cost, towards fair value may be harmful to users of the financial information. Despite the intent to create beneficial information for users, SFAS No. 144 and No. 142 have created a number of costs with limited benefits. Further, the move to fair value and increasingly subjective financial statements are creating a situation where it is very difficult to hold anyone responsible for unreliable, skewed, or unethical accounting.

With a number of questions remaining, and differing opinions as to the cost-benefit trade off, the overall value of SFAS No. 144 and No. 142 is hard to determine. Although many believe the costs outweigh the benefits, in the case of a reliable and verifiable write-down benefiting an external user in decision making, the costs may be worth incurring. If the move to fair value is maintained however, write ups may be just as beneficial to external users. Thus, it is not all of the principles behind SFAS No. 144 and No. 142, but the guidance, implementation and fair value measures that are flawed. Through an examination of the Statement of Financial Accounting Standards No. 144 and No. 142, conceptual characteristics, and the controversies regarding fair value, it seems that if guidance stays the same it is not only the external users that will suffer but ultimately the quality of the financial information itself.

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