
STANDING ADVISORY GROUP MEETING

AUDITING ACCOUNTING ESTIMATES AND FAIR VALUE MEASUREMENTS

JUNE 21, 2007

Introduction

In September 2004, the Standing Advisory Group ("SAG") discussed issues associated with auditing the measurement and disclosure of assets and liabilities at fair value. That discussion focused on the proposed revision of the existing framework for fair value measurements by the Financial Accounting Standards Board ("FASB") and the potential effect of such revisions to the auditing profession.

Since then, the FASB has made significant progress on its fair value projects. In September 2006, the FASB adopted Statement of Financial Accounting Standards ("FAS") No. 157, *Fair Value Measurements*. The standard, among other things, revises the definition of fair value and establishes a framework for measuring fair value in accordance with generally accepted accounting principles ("GAAP"). In February 2007, the FASB adopted FAS No. 159, *The Fair Value Option for Financial Assets and Liabilities*. That standard allows a company to elect to measure eligible financial assets and liabilities at fair value, under the framework established in FAS 157, and likely will result in some companies electing to measure certain of their assets and liabilities at fair value in the near term. However, it is probably still too early to determine the extent to which companies will adopt the fair value option.

In 2004 and 2005, the Executive Committee of the Auditing Section of the American Accounting Association formed research synthesis teams with the primary goal of providing PCAOB staff with a synthesis of existing research related to nine designated projects. The research synthesis paper prepared for one of those projects – fair value measurements – concluded, among other things, that there are a number of potential biases and limitations in the preparation and audit of fair value measurements. The paper further notes that

<p>This paper was developed by the staff of the Office of the Chief Auditor to foster discussion among the members of the Standing Advisory Group. It is not a statement of the Board; nor does it necessarily reflect the views of the Board or staff.</p>

the specialized valuation skills necessary to effectively audit fair value measurements are difficult for auditors to gain and maintain.^{1/}

Additionally, in December 2006, the International Auditing and Assurance Standards Board ("IAASB") approved an exposure draft of the proposed International Standard on Auditing 540 (Revised), *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures* ("Proposed ISA 540"). In doing so, the IAASB combined its previous separate standards on accounting estimates and fair value. A reason cited for the combination was that maintaining an ISA on fair value had little foundation from an auditing point of view, as similar issues often arise in auditing accounting estimates and fair value measurements. Comments on the proposal were due April 30, 2007.^{2/}

The SAG will again discuss issues associated with fair value; however, this discussion will focus on fair value within the broader context of auditing accounting estimates. This briefing paper provides an overview of issues related to auditing procedures used for accounting estimates and fair value measurements, including some of the limitations mentioned in the aforementioned academic paper. This briefing paper also explores whether there still is a need for two separate PCAOB auditing standards, one for accounting estimates and one for fair value measurements. Finally, this paper reviews some of the similarities and differences in the auditing procedures required pursuant to the respective auditing standards.

Uncertainty Inherent in Estimates and Fair Value Measurements

The risk of material misstatement is generally greater when account balances include accounting estimates rather than essentially factual data, because there is inherent subjectivity in estimating future events.^{3/} However, the risk associated with estimates can vary significantly. Some estimates do not pose

^{1/} The authors of this synthesis paper later published this paper as Roger D. Martin, Jay S. Rich, and T. Jeffrey Wilks, "Auditing Fair Value Measurements: A Synthesis of Relevant Research," *Accounting Horizons* (vol. 20, no. 3, September 2006), pp. 287-303.

^{2/} The exposure draft is located at <http://www.ifac.org/Guidance/EXD-Details.php?EDID=0069>.

^{3/} See paragraph .36 of AU sec. 312, *Audit Risk and Materiality in Conducting an Audit*. References to AU sections ("AU sec.") throughout this paper are to the Board's interim auditing standards, which are available on the PCAOB's Web site at www.pcaobus.org.

a high risk of misstatement because they are, for example, more verifiable. For example, sales returns and allowances for a mature product line might have lower risk because of the availability of historical returns data and the experience of the personnel who developed the estimates. However, complex and subjective accounting estimates pose higher risks of misstatement to the financial statements. For example, complex warranty provisions for a manufacturer or fair values of non-financial assets and liabilities acquired in a business combination often prove challenging to estimate and audit.

Discussion Question –

1. How does the market respond to accounting estimates and fair value measurements? Does the market respond differently to risks associated with fair value measurements as compared to other accounting estimates?

Auditing Fair Value Measurements and Accounting Estimates

The PCAOB interim auditing standards include a standard for auditing estimates (AU sec. 342, *Auditing Accounting Estimates*.) and a standard for auditing fair value (AU sec. 328, *Auditing Fair Value Measurements and Disclosures*). However, the underlying principle for the auditor for evaluating the reasonableness of the estimate in light of inherent uncertainty is generally the same for all estimates, including fair value measurements.

The table below shows examples of fair value measurements, for which AU sec. 328 would be primarily applicable, and accounting estimates, for which AU sec. 342 would be applicable.

Fair Value Measurements (AU sec. 328)	Accounting Estimates (AU sec. 342)
Derivatives	Uncollectible receivables
Financial instruments other than those held to maturity	Useful lives and residual value of equipment
Asset retirement obligations	Allowance for loan losses
Servicing rights	Depreciation and amortization
Stock-based compensation	Warranty claims
Intangible assets	Percent of completion
Impaired long-lived assets	Insurance company loss reserves

The two standards provide a similar general framework for auditing the estimate or fair value measurement. For example, AU sec. 342.10 provides that the auditor should use one or a combination of three approaches when

evaluating the reasonableness of management's accounting estimates. Similarly, AU sec. 328.26 describes three alternatives that may be involved in substantive testing of fair value measurements. These alternatives are close in nature to the three approaches identified in AU sec. 342.

Although the two standards have similar frameworks, AU sec. 328.06 notes the following differences and similarities between fair value measurements and other estimates:

Assumptions used in fair value measurements are similar in nature to those required when developing other accounting estimates. However, if observable market prices are not available, GAAP requires that valuation methods incorporate assumptions that marketplace participants would use in their estimates of fair value whenever that information is available without undue cost and effort. If information about market assumptions is not available, an entity may use its own assumptions as long as there are no contrary data indicating that marketplace participants would use different assumptions. These concepts generally are not relevant for accounting estimates made under measurement bases other than fair value.

The fair value measurement framework established within FAS 157 provides additional matters that distinguish fair value measurements from other accounting estimates. For example, a fair value measurement assumes that a transaction to sell an asset or transfer a liability occurs in the principal market for that asset or liability. In the absence of a principal market, the framework assumes the most advantageous market. FAS 157 also establishes an order of reliability for fair value measurements based upon the inputs to the valuation techniques used to measure assets or liabilities. This new hierarchy gives highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs to valuation techniques. These considerations and others provided within FAS 157 add to the list of unique matters that preparers and auditors must consider when addressing fair value measurements.

As previously mentioned, Proposed ISA 540 combines the auditor's responsibility for auditing accounting estimates and fair value measurements into a single auditing standard. The IAASB combined these standards principally due to the similar processes and assumptions an auditor would consider when auditing accounting estimates and fair value measurements.

Discussion Question –

2. Should the auditor's responsibilities for accounting estimates and fair value measurements be combined into a single standard or do the differences between them warrant that they continue to be stated within separate auditing standards?

Testing

AU secs. 342 and 328 frame the auditor's overall responsibilities for testing differently. For example, AU sec. 342.10 provides that, in evaluating the reasonableness of an estimate, the auditor should obtain an understanding of how management developed the estimate. Based on that understanding, the auditor should use one or a combination of the following approaches:

- Review and test the process that the company used to develop the estimate,
- Develop an independent expectation of the estimate to corroborate the reasonableness of the company's estimate,
- Review subsequent events or transactions occurring after the fieldwork has been completed.

Further, AU sec. 342 provides additional procedures the auditor considers performing when reviewing and testing management's process, but does not set forth any procedural requirements. AU sec. 342.10 also provides that, as part of an audit of internal control over financial reporting, the auditor is required to obtain an understanding of the process management used to develop the estimate and to test controls over relevant assertions related to the estimate.

AU sec. 328 does not follow the framework of the three testing options as outlined in AU sec. 342, but rather provides more specific direction on the procedures to be performed particularly in the area of reviewing and testing the company's process. For instance, AU sec. 328 states that the auditor should:

- Obtain an understanding of the entity's process for determining fair value measurements and disclosures,
- Evaluate whether the fair value measurements are in conformity with GAAP,

- Evaluate whether the entity's method of determining fair value measurements is applied consistently,
- Test the entity's fair value measurements,
- Evaluate whether the significant assumptions used in measuring fair value provide a reasonable basis for the measurement,
- Test the data used to develop the fair value measurements and disclosures.

In testing fair value measurements AU sec. 328 states that such tests may include developing an independent estimate and reviewing subsequent events and transactions.

Proposed ISA 540 takes an approach similar to AU sec. 342.10. However, rather than providing three testing options, Proposed ISA 540 provides four options. Specifically, Proposed ISA 540 states that the auditor shall undertake one or more of the following, taking account of the nature of the accounting estimate:

- Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate,
- Test how management made the accounting estimate and the data on which it is based,
- Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures,
- Develop a point estimate or range to evaluate management's point estimate.

In addition, if the auditor identifies an estimate as being a significant risk, Proposed ISA 540 states the auditor shall also evaluate the following:

- How management has considered alternative assumptions or outcomes, and why it has rejected them,
- Whether the significant assumptions used by management are reasonable,

- Management's intent to carry out specific courses of action and its ability to do so.

Discussion Questions –

3. Should the procedures for auditing fair value measurements and other accounting estimates be the same? If not, what unique circumstances require that the procedures be different?
4. Are there circumstances that might indicate that the auditor should use a particular approach or combination of approaches rather than leaving the determination to the auditor's professional judgment?
5. What types of accounting estimates and fair value measurements warrant the auditor performing additional audit procedures? Are there any specific accounting estimates or fair value measurements that always pose a higher risk?

Review and Test of the Process Used by Management

The standards on auditing fair value measurements and accounting estimates describe how an auditor might evaluate management's process and assumptions. However, the two standards have different requirements for this evaluation. AU sec. 328 contains considerable direction for evaluating assumptions, but more limited direction for evaluating the process than AU sec. 342. Conversely, AU sec. 342 has considerable direction for evaluating the process but more limited direction for evaluating the reasonableness of the assumptions than AU. sec. 328.

For example, AU sec. 328.26-.39 contains direction primarily related to evaluating the reasonableness of the assumptions in the fair value measurement. AU sec. 328.28 states:

Where applicable, the auditor should evaluate whether the significant assumptions used by management in measuring fair value, taken individually and as a whole, provide a reasonable basis for the fair value measurements and disclosures in the entity's financial statements.

AU sec. 328 addresses the auditor's responsibilities for the process in a less direct way than AU sec. 342 does. AU sec. 328.19 directs the auditor to evaluate whether the company's process for determining fair value measurements is consistently applied and, if so, whether the consistency is appropriate. AU sec. 328.23 provides that substantive tests of the fair value

measurements may involve testing management's significant assumptions, the valuation model, and the underlying data. AU sec. 328.26 states that the auditor's understanding of the reliability of the process used by management is an important element in support of the resulting amounts and therefore affects the nature, timing, and effect of audit procedures. AU sec. 328.27 provides that estimation methods and assumptions, and the auditor's consideration and comparison of prior period fair value measurements to the current period, may provide evidence of the reliability of management's process.

AU sec. 342, on the other hand, does not specifically require the auditor to evaluate whether the assumptions incorporated into the development of management's estimates are reasonable. Instead, AU sec. 342.11 focuses on procedures to test the company's process for developing an estimate. The standard indicates the auditor may consider the following procedures when using this approach:

Identify the sources of data and factors that management used in forming the assumptions, and consider whether such data and factors are relevant, reliable, and sufficient for the purpose based on information gathered in other audit tests; [and]

Evaluate whether the assumptions are consistent with each other, the supporting data, relevant historical data, and industry data.

Discussion Question –

6. Should the auditing procedures to review and test the process used by management, including a review of the reasonableness of assumptions, be similar for accounting estimates and fair value measurements? If not, what is the reason for the difference in the approach?

Independent Estimates and Review of Subsequent Transactions

For some estimates and fair value measurements, the auditor might consider it appropriate to develop an independent estimate in addition to, or instead of, the procedures performed related to management's process used to develop the estimates. For example, the auditor might develop an independent estimate of the value of a material intangible asset (e.g., as part of an impairment analysis of a long-lived asset) to gather additional evidence in support of management's related assertions.

In other circumstances, it might not be practical or possible to develop an independent expectation for significant estimates. For example, it would be unlikely that the auditor of a large financial institution could perform an

independent estimate of the fair value of every outstanding derivative financial instrument; such an institution might have thousands of open contracts at any given time. In these and similar situations, the auditor might prepare independent estimates for only a selection of the open contracts. However, the majority of assurance that the auditor gains in such circumstances would be obtained through his or her procedures related to reviewing and testing management's process.^{4/}

The auditor's use of subsequent events or transactions as evidence in support of management's assertions related to accounting estimates is limited to the extent that such information is available. Also, FAS 157 states that the fair value of an asset or liability at the measurement date shall be determined based on the assumptions that market participants would use in pricing the asset or liability. A transaction consummated after the reporting date might include information that was not available for consideration as of the measurement date. If that is the case, the evidence provided may not be relevant, particularly to fair value measurements prepared in accordance with FAS 157.

FAS 157 states that a company should use a valuation technique consistent with the market, income, or cost approach. Inputs to a valuation technique are assumptions that a market participant^{5/} would use in pricing the asset or liability, including assumptions about risk. Observable inputs reflect assumptions a market participant would use based on market data obtained from an independent source. Unobservable inputs reflect the company's own assumptions about assumptions a market participant would use based on the best information available in the circumstances. FAS 157 requires that valuation techniques should maximize the use of observable inputs and minimize the use of unobservable inputs.

Observable market prices, such as the quoted price of a financial instrument in an active market or the current yield of a 10-year U.S. Treasury note, provide the best evidence of fair value. For unobservable inputs, such as expected cash flows and discount rates used in the income approach for valuing

^{4/} The Board has an interim standard on derivatives, AU sec. 332, *Auditing Derivative Instruments*. Because the accounting standards require derivatives to be measured at fair value, AU sec. 328 also applies when auditing derivatives.

^{5/} In general, a market participant is independent of the company (i.e., not a related party), knowledgeable, able to transact for the asset or liability, and willing to transact (i.e., they are motivated but not forced or compelled to). See FAS 157, paragraph 10.

intangible assets acquired in a business combination, the auditor may not have independent data to which he or she can compare the company's assumptions.

Discussion Question –

7. Are the development of independent estimates and the review of subsequent events effective procedures for auditing accounting estimates and fair value measurements and disclosures? Are there situations for which these approaches are ineffective?

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