AU Section 342

Auditing Accounting Estimates

Source: SAS No. 57; SAS No. 113.

See section 9342 for interpretations of this section.

Effective for audits of financial statements for periods beginning on or after January 1, 1989, unless otherwise indicated.

.01 This section provides guidance to auditors on obtaining and evaluating sufficient appropriate audit evidence to support significant accounting estimates in an audit of financial statements in accordance with generally accepted auditing standards. For purposes of this section, an *accounting estimate* is an approximation of a financial statement element, item, or account. Accounting estimates are often included in historical financial statements because—

a. The measurement of some amounts or the valuation of some accounts is uncertain, pending the outcome of future events.

b. Relevant data concerning events that have already occurred cannot be accumulated on a timely, cost-effective basis.

[Revised, March 2006, to reflect conforming changes necessary due to the issuance of Statement on Auditing Standards No. 105.]

.02 Accounting estimates in historical financial statements measure the effects of past business transactions or events, or the present status of an asset or liability. Examples of accounting estimates include net realizable values of inventory and accounts receivable, property and casualty insurance loss reserves, revenues from contracts accounted for by the percentage-of-completion method, and pension and warranty expenses.[1]

.03 Management is responsible for making the accounting estimates included in the financial statements. Estimates are based on subjective as well as objective factors and, as a result, judgment is required to estimate an amount at the date of the financial statements. Management's judgment is normally based on its knowledge and experience about past and current events and its assumptions about conditions it expects to exist and courses of action it expects to take.

.04 The auditor is responsible for evaluating the reasonableness of accounting estimates made by management in the context of the financial statements taken as a whole. As estimates are based on subjective as well as objective factors, it may be difficult for management to establish controls over them. Even when management's estimation process involves competent personnel using relevant and reliable data, there is potential for bias in the subjective factors. Accordingly, when planning and performing procedures to evaluate accounting estimates, the auditor should consider, with an attitude of professional skepticism, both the subjective and objective factors.

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[1] Additional examples of accounting estimates included in historical financial statements are presented in paragraph .16.

Developing Accounting Estimates

.05 Management is responsible for establishing a process for preparing accounting estimates. Although the process may not be documented or formally applied, it normally consists of—

a. Identifying situations for which accounting estimates are required.

b. Identifying the relevant factors that may affect the accounting estimate.

c. Accumulating relevant, sufficient, and reliable data on which to base the estimate.

d. Developing assumptions that represent management's judgment of the most likely circumstances and events with respect to the relevant factors.

e. Determining the estimated amount based on the assumptions and other relevant factors.

f. Determining that the accounting estimate is presented in conformity with applicable accounting principles and that disclosure is adequate.

The risk of material misstatement of accounting estimates normally varies with the complexity and subjectivity associated with the process, the availability and reliability of relevant data, the number and significance of assumptions that are made, and the degree of uncertainty associated with the assumptions.

Internal Control Related to Accounting Estimates

.06 An entity's internal control may reduce the likelihood of material misstatements of accounting estimates. Specific relevant aspects of internal control include the following:

a. Management communication of the need for proper accounting estimates

b. Accumulation of relevant, sufficient, and reliable data on which to base an accounting estimate

c. Preparation of the accounting estimate by qualified personnel

d. Adequate review and approval of the accounting estimates by appropriate levels of authority, including—

1. Review of sources of relevant factors
2. Review of development of assumptions
3. Review of reasonableness of assumptions and resulting estimates
4. Consideration of the need to use the work of specialists
5. Consideration of changes in previously established methods to arrive at accounting estimates

e. Comparison of prior accounting estimates with subsequent results to assess the reliability of the process used to develop estimates

f. Consideration by management of whether the resulting accounting estimate is consistent with the operational plans of the entity.

Evaluating Accounting Estimates

.07 The auditor's objective when evaluating accounting estimates is to obtain sufficient appropriate audit evidence to provide reasonable assurance that—

a. All accounting estimates that could be material to the financial statements have been developed.

b. Those accounting estimates are reasonable in the circumstances.

c. The accounting estimates are presented in conformity with applicable accounting principles[2] and are properly disclosed.[3]

[Revised, March 2006, to reflect conforming changes necessary due to the issuance of Statement on Auditing Standards No. 105.]

Identifying Circumstances That Require Accounting Estimates

.08 In evaluating whether management has identified all accounting estimates that could be material to the financial statements, the auditor considers the circumstances of the industry or industries in which the entity operates, its methods of conducting business, new accounting pronouncements, and other external factors. The auditor should consider performing the following procedures:

a. Consider assertions embodied in the financial statements to determine the need for estimates. (See paragraph .16 for examples of accounting estimates included in financial statements.)

b. Evaluate information obtained in performing other procedures, such as—

1. Information about changes made or planned in the entity's business, including changes in operating strategy, and the industry in which the entity operates that may indicate the need to make an accounting estimate (section 311, *Planning and Supervision*).
2. Changes in the methods of accumulating information.
3. Information concerning identified litigation, claims, and assessments (section 337, *Inquiry of a Client's Lawyer Concerning Litigation, Claims, and Assessments*), and other contingencies.
4. Information from reading available minutes of meetings of stockholders, directors, and appropriate committees.
5. Information contained in regulatory or examination reports, supervisory correspondence, and similar materials from applicable regulatory agencies.

c. Inquire of management about the existence of circumstances that may indicate the need to make an accounting estimate.

Evaluating Reasonableness

.09 In evaluating the reasonableness of an estimate, the auditor normally concentrates on key factors and assumptions that are—

a. Significant to the accounting estimate.

b. Sensitive to variations.

c. Deviations from historical patterns.

d. Subjective and susceptible to misstatement and bias.

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[2] [Footnote deleted, October 2009, to reflect conforming changes necessary due to the withdrawal of SAS No. 69.]

[3] Section 431, *Adequacy of Disclosure in Financial Statements*, discusses the auditor's responsibility to consider whether the financial statements include adequate disclosures of material matters in light of the circumstances and facts of which he is aware.

The auditor normally should consider the historical experience of the entity in making past estimates as well as the auditor's experience in the industry. However, changes in facts, circumstances, or entity's procedures may cause factors different from those considered in the past to become significant to the accounting estimate.[4]

.10 In evaluating reasonableness, 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:

a. Review and test the process used by management to develop the estimate.

b. Develop an independent expectation of the estimate to corroborate the reasonableness of management's estimate.

c. Review subsequent events or transactions occurring prior to the date of the auditor's report.

[As amended, effective for audits of financial statements for periods ending on or after December 15, 2006, by Statement on Auditing Standards No. 113.]

.11 Review and test management's process. In many situations, the auditor assesses the reasonableness of an accounting estimate by performing procedures to test the process used by management to make the estimate. The following are procedures the auditor may consider performing when using this approach:

a. Identify whether there are controls over the preparation of accounting estimates and supporting data that may be useful in the evaluation.

b. 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.

c. Consider whether there are additional key factors or alternative assumptions about the factors.

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

e. Analyze historical data used in developing the assumptions to assess whether the data is comparable and consistent with data of the period under audit, and consider whether such data is sufficiently reliable for the purpose.

f. Consider whether changes in the business or industry may cause other factors to become significant to the assumptions.

g. Review available documentation of the assumptions used in developing the accounting estimates and inquire about any other plans, goals, and objectives of the entity, as well as consider their relationship to the assumptions.

h. Consider using the work of a specialist regarding certain assumptions (section 336, *Using the Work of a Specialist*).

i. Test the calculations used by management to translate the assumptions and key factors into the accounting estimate.

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[4] In addition to other evidential matter about the estimate, in certain instances, the auditor may wish to obtain written representation from management regarding the key factors and assumptions.

.12 *Develop an expectation.* Based on the auditor's understanding of the facts and circumstances, he may independently develop an expectation as to the estimate by using other key factors or alternative assumptions about those factors.

.13 *Review subsequent events or transactions.* Events or transactions sometimes occur subsequent to the date of the balance sheet, but prior to the date of the auditor's report, that are important in identifying and evaluating the reasonableness of accounting estimates or key factors or assumptions used in the preparation of the estimate. In such circumstances, an evaluation of the estimate or of a key factor or assumption may be minimized or unnecessary as the event or transaction can be used by the auditor in evaluating their reasonableness. [As amended, effective for audits of financial statements for periods ending on or after December 15, 2006, by Statement on Auditing Standards No. 113.]

.14 As discussed in section 312, *Audit Risk and Materiality in Conducting an Audit*, paragraph .56, the auditor evaluates the reasonableness of accounting estimates in relationship to the financial statements taken as a whole:

> Because no one accounting estimate can be considered accurate with certainty, the auditor may determine that a difference between an estimated amount best supported by the audit evidence and the estimated amount included in the financial statements may not be significant, and such difference would not be considered to be a likely misstatement. However, if the auditor believes the estimated amount included in the financial statements is unreasonable, he or she should treat the difference between that estimate and the closest reasonable estimate as a likely misstatement.

[Revised, March 2006, to reflect conforming changes necessary due to the issuance of Statement on Auditing Standards No. 107.]

Effective Date

.15 This section is effective for audits of financial statements for periods beginning on or after January 1, 1989. Early application of the provisions of this section is permissible.

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Appendix

Examples of Accounting Estimates

The following are examples of accounting estimates that are included in financial statements. The list is presented for information only. It should not be considered all-inclusive.

Receivables:
- Uncollectible receivables
- Allowance for loan losses
- Uncollectible pledges

Inventories:
- Obsolete inventory
- Net realizable value of inventories where future selling prices and future costs are involved
- Losses on purchase commitments

Financial instruments:
- Valuation of securities
- Trading versus investment security classification
- Probability of high correlation of a hedge
- Sales of securities with puts and calls

Productive facilities, natural resources and intangibles:
- Useful lives and residual values
- Depreciation and amortization methods
- Recoverability of costs
- Recoverable reserves

Accruals:
- Property and casualty insurance company loss reserves
- Compensation in stock option plans and deferred plans
- Warranty claims
- Taxes on real and personal property Renegotiation refunds
- Actuarial assumptions in pension costs

Revenues:
- Airline passenger revenue
- Subscription income
- Freight and cargo revenue
- Dues income
- Losses on sales contracts

Contracts:
- Revenue to be earned
- Costs to be incurred
- Percent of completion

Leases:
- Initial direct costs
- Executory costs
- Residual values

Litigation:
- Probability of loss
- Amount of loss

Rates:
- Annual effective tax rate in interim reporting
- Imputed interest rates on receivables and payables
- Gross profit rates under program method of accounting

Other:
- Losses and net realizable value on disposal of segment or restructuring of a business
- Fair values in nonmonetary exchanges
- Interim period costs in interim reporting
- Current values in personal financial statements