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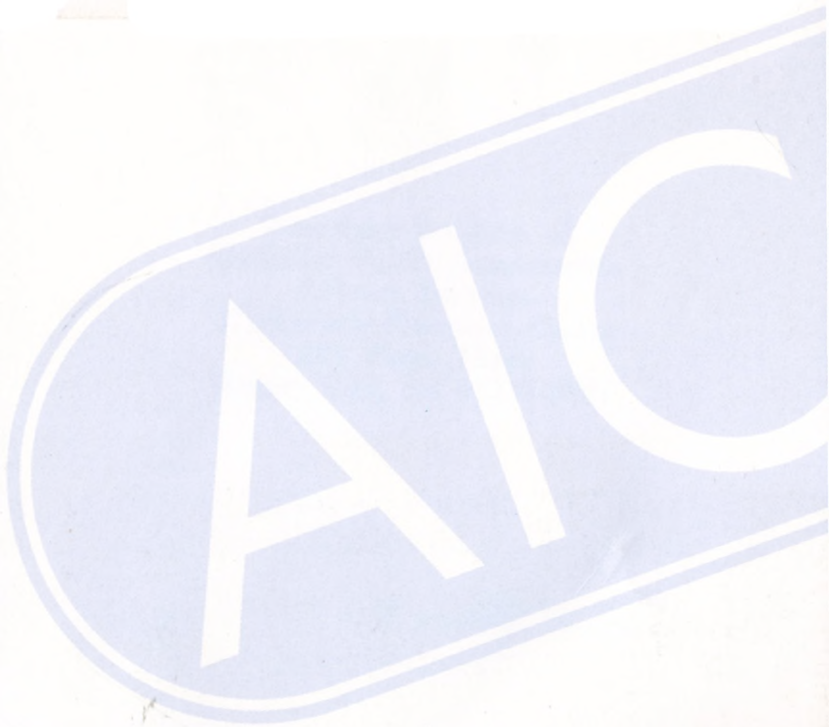
Audit Issues in Revenue Recognition



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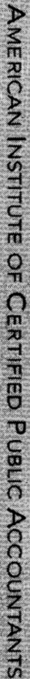

Audit Issues in Revenue Recognition

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INTRODUCTION

Revenue recognition continues to pose significant audit risk to auditors and has contributed to a perceived erosion in the integrity of the financial reporting process. In 1998, several high-profile incidents of improper revenue recognition attracted the attention of the business media and led to unflattering coverage. A substantial portion of the litigation against accounting firms reported to the AICPA SEC Practice Section Quality Control Inquiry Committee cite revenue recognition issues. The number of Securities and Exchange Commission (SEC) Accounting and Auditing Enforcement Releases involving improper revenue recognition has increased dramatically in recent years. Some of these cases have resulted in significant restatements of previously issued financial statements going back several years. Recently, the SEC expressed concerns about improper revenue recognition, among other issues, in a series of meetings held with members of the financial reporting, auditing, and standards-setting community, including the AICPA's Auditing Standards Board (ASB).

The implications are wide reaching. Investor confidence has driven the unparalleled success of the U.S. capital markets, and a key component in creating that confidence is the confirming role of audited financial statements. In this publication, the AICPA's intent is to help auditors fulfill their professional responsibilities with regard to auditing assertions about revenue. This publication—

- Discusses the responsibilities of management, boards of directors, and audit committees for reliable financial reporting.
- Summarizes key accounting guidance regarding whether and when revenue should be recognized in accordance with generally accepted accounting principles (GAAP).
- Identifies circumstances and transactions that may signal improper revenue recognition.
- Summarizes key aspects of the auditor's responsibility to plan and perform an audit under generally accepted auditing standards (GAAS).
- Describes procedures that the auditor may find effective in limiting audit risk arising from improper revenue recognition.

The primary focus of this publication is revenue recognition for sales of goods and services (other than lending activities) by for-profit enterprises in the ordinary course of business. Revenue recognition for governmental and not-for-profit entities is beyond the scope of this publication. With the exception of software revenue recognition, industry-specific guidance is not discussed herein, although auditors and financial man-

agement may consult the "Resources" section at the end of this publication for industry-specific accounting and auditing literature.

In addition, SEC staff is developing a Staff Accounting Bulletin to address revenue recognition. It will be posted on the SEC's Web site at www.sec.gov.

RESPONSIBILITY FOR RELIABLE REPORTING

Management is responsible for the preparation and fair presentation of financial statements, including reported revenues. Among the financial reporting objectives relevant to assertions about revenue are the following.

- Recorded sales during the accounting period represent actual shipments of goods or rendering of services to customers who have made firm, enforceable commitments to purchase such goods or services.
- Deferred revenues are recognized in the appropriate period when shipments are made or services are rendered or other conditions requiring deferral are no longer present.
- Estimated amounts of reserves for sales returns, provision for customer rebates and dealer or customer discounts, and allowances for uncollectible receivables are reasonable.
- Policies for revenue recognition are adequately disclosed.[1]

Misstatements in reported revenue may result from error or from faulty judgment in the application of accounting principles. Revenue recognition principles sometimes are difficult to apply, especially in complex or unusual transactions, and often vary by industry. Management may inappropriately use "aggressive" accounting policies that reflect their understanding of the economic substance of the transactions and of industry practice. Misstatements in revenue also may arise when entity personnel at various levels participate in schemes, frequently with the collusion of others within the entity or with customers or suppliers, to overstate revenues intentionally. Intentional misstatement of the financial statements is fraudulent financial reporting.

This section discusses the factors and conditions within an enterprise that may mitigate the risk that improper revenue recognition will occur, whether it is caused by error or fraud.

DETERRENTS TO IMPROPER REVENUE RECOGNITION

The National Commission on Fraudulent Financial Reporting, called the Treadway Commission (the Commission) after its Chairman, James C. Treadway, Jr., undertook a study from 1985 to 1987 to identify causal factors that can lead to fraudulent financial reporting and to develop

[1] Revenue recognition in this publication is understood to be in accordance with generally accepted accounting principles (GAAP).

recommendations to reduce its incidence. The Commission's recommendations also are relevant for reducing the incidence of misstatements in financial reporting that result from errors, including the unintentional misapplication of accounting principles. Some of the Commission's recommendations for public companies, including recommendations that address the tone set by top management, the audit committee, the internal audit function, and internal control, are discussed below.

Tone at the Top

The Commission stated the following:

> The tone set by top management—the corporate environment or culture within which financial reporting occurs—is the most important factor contributing to the integrity of the financial reporting process. Notwithstanding an impressive set of written rules and procedures, if the tone set by management is lax, fraudulent financial reporting is more likely to occur.[2]

The Commission recommended that top management and the board of directors develop, communicate, and enforce a Code of Corporate Conduct to foster a strong ethical climate within the entity.

Audit Committee of the Board of Directors

The Commission recommended that the audit committee of the board of directors be composed of independent (outside) directors. It also recommended that a written charter set forth their duties and responsibilities, and that they be given adequate resources and authority to fulfill their role of informed, vigilant, and effective overseers of the financial reporting process and the company's internal controls. An effective audit committee can help deter improper conduct by management. The important role of the audit committee in corporate governance also has been discussed in reports by the Public Oversight Board of the SEC Practice Section of the AICPA.[3] More recently, Arthur Levitt, Chairman of the SEC, and Lynn Turner, its Chief Accountant, have reiterated the call for the empowerment of audit committees that function as qualified, independent, committed, and tough-minded guardians of investor interests and corporate accountability. In response, the New York Stock Exchange and the National

---

[2] *Report of the National Commission on Fraudulent Financial Reporting*, October 1987, p. 32.

[3] These reports are *In the Public Interest: Issues Confronting the Accounting Profession*, published in March 1993, and *Strengthening the Professionalism of the Independent Auditor*, a Report to the Public Oversight Board of the SEC Practice Section, AICPA from the Advisory Panel on Auditor Independence, published in September 1994.

Association of Securities Dealers are sponsoring a blue-ribbon panel drawn from the various constituencies of the financial community to study the effectiveness of audit committees and to make concrete recommendations for improving audit committee oversight of the financial reporting process.

Internal Audit Function

The Commission recommended that companies maintain an effective internal audit function that is adequately staffed with qualified personnel appropriate to the size and nature of the company. To enhance the objectivity of the internal audit function, the chief internal auditor should have direct access and report regularly to the company's chief executive officer and to the audit committee. An important responsibility of the internal audit function is to monitor the performance of an entity's controls.

Internal Control

The Commission also recommended that a framework of internal control be developed to enable management to identify and assess the risks of fraudulent financial reporting, and to design and implement internal controls that will provide reasonable assurance that fraudulent financial reporting will be prevented or subject to early detection. The outcome of this recommendation is *Internal Control—Integrated Framework*, a report published in 1992 by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission (the COSO Report). The COSO Report describes internal control as a process consisting of five interrelated components that are necessary for entity objectives, including reliable financial reporting, to be achieved. The five components of internal control are the control environment, risk assessment, control activities, information and communication, and monitoring. Echoing the Commission's conclusion, the COSO Report states that the control environment sets the tone of an organization, influencing the control consciousness of its people, and is the foundation for all other components of internal control.

In addition, the Foreign Corrupt Practices Act of 1977 establishes a legal requirement that every SEC registrant devise and maintain a system of internal accounting controls sufficient to provide reasonable assurance that certain objectives are met, including that transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP. Some companies document the policies that management has established to comply with requirements of the Foreign Corrupt Practices Act and also require their employees, including the sales and marketing organizations, to certify that they have read and complied with the company's policies.

Internal Control and Assertions About Revenue

The significant financial statement accounts relating to management's assertions about revenue include sales, sales returns and allowances, service revenue, accounts receivable and related allowance accounts, deferred revenues, and cash. Management is responsible for the design, implementation, and effective operation of internal control over transactions in these accounts, including the development of significant accounting estimates and disclosures, in order to achieve the financial reporting objectives that were discussed in the first paragraph of this section. Internal control with respect to assertions about revenue is a process that involves management's—

- Identification, analysis, and management of risks that may cause misstatements of accounts involving assertions about revenue, including a consideration of how significant estimates are developed, the possibility that unauthorized transactions may be recorded, and the possibility that authorized transactions may be recorded erroneously or omitted.
- Design and implementation of an information system, which includes the accounting system, and the methods and records established to accurately record, process, summarize, and report transactions, as well as the processes used to prepare significant accounting estimates and disclosures, regarding assertions about revenue.
- Design and implementation of control activities, including documented policies and procedures applied in the processing of transactions that flow through the accounting system in order to prevent, or promptly detect, misstatements in revenue.
- Monitoring of the design and operating effectiveness of internal controls over assertions about revenue to determine if they are operating as intended, and if not, to take corrective action.

Underlying the above, the control environment is the most significant factor influencing the integrity of reported revenue. The control environment includes factors such as integrity and ethical values, management's philosophy and operating style, board of directors or audit committee participation, commitment to competence, and assignment of authority and responsibility.

The COSO Report notes that internal control has inherent limitations. The benefits of controls must be considered relative to costs due to resource constraints. Another limiting factor is faulty human judgment in decision making, or mistakes in application, on the part of a person responsible for establishing or performing a control. Furthermore, controls can be circumvented by the collusion of two or more people and by management override.

Both the Treadway Commission and the COSO Report stress the importance of management establishing and maintaining an appropriate tone at the top. An effective control environment fosters and in turn is reinforced by an effective audit committee, internal audit function, and internal control process. Collectively, these functions support management in achieving its objective of fair presentation of financial information.

SUMMARY OF SELECTED ACCOUNTING LITERATURE ON REVENUE RECOGNITION

As noted previously, revenue recognition for purposes of this publication is understood to mean in accordance with generally accepted accounting principles (GAAP). This section summarizes some of the key authoritative accounting literature relevant to revenue recognition for sales of goods and services, including the conceptual basis for revenue recognition and also specific revenue recognition guidance for right of return, bill and hold, contract accounting, and sales of software, among others. The following paragraphs are not intended to be a substitute for the original pronouncements.

Conceptual Basis for Revenue Recognition

The conceptual basis for revenue recognition is contained in Financial Accounting Standards Board (FASB) Statement of Financial Accounting Concepts No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises.* Paragraph 83 states that recognition of revenue involves consideration of two factors, (a) being realized or realizable and (b) being earned. Paragraph 83(b) states:

> Revenues are not recognized until earned. An entity's revenue-earning activities involve delivering or producing goods, rendering services, or other activities that constitute its ongoing major or central operations, and revenues are considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues. [Footnote omitted]

Paragraph 84(a) states that revenues from manufacturing and selling activities are commonly recognized at time of sale, usually meaning delivery.

Revenue Recognition When Right of Return Exists

FASB Statement of Financial Accounting Standards No. 48, *Revenue Recognition When Right of Return Exists*, establishes accounting and reporting standards for sales of a product when the buyer has the right to return the product. Paragraph 6 provides that in such circumstances, revenue from the sales transaction should be recognized at time of sale only if *all* of the following conditions are met.

a. The seller's price to the buyer is substantially fixed or determinable at the date of sale.
b. The buyer has paid the seller, or the buyer is obligated to pay the seller and the obligation is not contingent on resale of the product.

c. The buyer's obligation to the seller would not be changed in the event of theft or physical destruction or damage of the product.

d. The buyer acquiring the product for resale has economic substance apart from that provided by the seller. [Footnote omitted]

e. The seller does not have significant obligations for future performance to directly bring about resale of the product by the buyer.

f. The amount of future returns[3] can be reasonably estimated (paragraph 8).

---

[3] Exchanges by ultimate customers of one item for another of the same kind, quality, and price (for example, one color or size for another) are not considered returns for purposes of this Statement.

If the above conditions are not met, sales recognition should be postponed until the right of return substantially expires or until such time that the conditions are met.

If revenue is recognized at time of sale because the above conditions are met, FASB Statement No. 48 requires that costs or losses that may be expected in connection with returns must be accrued in accordance with FASB Statement No. 5, *Accounting for Contingencies.* Sales revenue and cost of sales reported in the income statement should be reduced to reflect estimated returns.

Paragraph 8 of FASB Statement No. 48 describes a number of factors that may impair (but not necessarily preclude) the ability to make a reasonable estimate of the amount of future returns. Among those factors are the susceptibility of the product to significant external factors (for example, obsolescence or changes in demand); the absence of or lack of relevance of historical experience to the circumstances (for example, if a product, market, or customer is new); the length of the return period; and the absence of a large volume of relatively homogeneous transactions.

Paragraph 4 notes that FASB Statement No. 48 does not apply to:

> (a) accounting for revenue in service industries if part or all of the service revenue may be returned under cancellation privileges granted to the buyer, (b) transactions involving real estate or leases, or (c) sales transactions in which a customer may return defective goods, such as under warranty provisions.

Bill and Hold Sales

In a bill and hold transaction, a customer agrees to purchase the goods but the seller retains physical possession until the customer requests shipment to designated locations. Normally, such an arrangement does

not qualify as a sale because delivery has not occurred. Under certain conditions, however, when a buyer has made an absolute purchase commitment and has assumed the risks and rewards of the purchased product but is unable to accept delivery because of a compelling business reason, bill and hold sales may qualify for revenue recognition.

SEC Accounting and Auditing Enforcement Release (AAER) No. 108 specifies certain conditions or criteria that a bill and hold transaction of a public company should meet in order to qualify for revenue recognition. In addition, it specifies certain factors that should be considered in evaluating whether a bill and hold transaction meets the requirements for revenue recognition. AAER No. 108 states the following.

> [A] "bill and hold" transaction should meet the following conditions:
>
> (1) The risks of ownership must have passed to the buyer;
>
> (2) The customer must have made a fixed commitment to purchase the goods, preferably reflected in written documentation;
>
> (3) The buyer, not the seller, must request that the transaction be on a bill and hold basis. The buyer must have a substantial business purpose for ordering the goods on a bill and hold basis;
>
> (4) There must be a fixed schedule for delivery of the goods. The date for delivery must be reasonable and must be consistent with the buyer's business purpose (e.g., storage periods are customary in the industry);
>
> (5) The seller must not have retained any specific performance obligations such that the earning process is not complete;
>
> (6) The ordered goods must have been segregated from the seller's inventory and not be subject to being used to fill other orders; and
>
> (7) The equipment must be complete and ready for shipment.
>
> The above listed conditions are the important conceptual criteria which should be used in evaluating any purported bill and hold sale. This listing is not intended as a check list. In some circumstances, a transaction may meet all the factors listed above but not meet the requirements for revenue recognition.
>
> In applying the above criteria to a purported bill and hold sale, the individuals responsible for preparation and filing of the financial statements should also consider the following factors:
>
> (1) The date by which the seller expects payment, and whether it has modified its normal billing and credit terms for this buyer;
>
> (2) The seller's past experiences with and pattern of bill and hold transactions;
>
> (3) Whether the buyer has the expected risk of loss in the event of a decline in the market value of the goods;
>
> (4) Whether the seller's custodial risks are insurable and insured;

(5) Whether APB Opinion No. 21, pertaining to the need for discounting the related receivables, is applicable;[3] and

(6) Whether extended procedures are necessary in order to assure that there are no exceptions to the buyer's commitment to accept and pay for the goods sold, i.e., that the business reasons for the bill and hold have not introduced a contingency to the buyer's commitment.

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[3] Once the individuals responsible for preparation and filing of the financial statements have ascertained that the revenue may be properly recognized, they of course, have an on-going obligation to review for collectibility of the bill and hold receivable.

Although AAER No. 108 is not binding on nonpublic companies, they may find it useful in analyzing bill and hold transactions.

CONTRACT ACCOUNTING

Accounting Research Bulletin No. 45, Long-Term Construction-Type Contracts

Accounting Research Bulletin (ARB) No. 45, *Long-Term Construction-Type Contracts*, describes the advantages and disadvantages of the percentage-of-completion and completed-contract methods of accounting for long-term construction-type contracts. The standard establishes a preference for the use of percentage-of-completion accounting when estimates of costs to complete and extent of progress toward completion of long-term contracts are reasonably dependable. The advantages of percentage-of-completion are the periodic recognition of income as it is earned, and the reflection of the status of uncompleted contracts that is provided through the current estimates of costs to complete or of progress toward completion. The disadvantage is that it is necessarily dependent upon estimates and, therefore, subject to uncertainty. In the absence of reasonably dependable estimates, or if inherent hazards cause forecasts to be doubtful, the completed contract method should be used. The completed-contract method does not permit the recording of income prior to completion, or substantial completion, of the contract. Therefore, the recording of income is not subject to the uncertainties of estimates, but the disadvantage is that the completed-contract method does not reflect current performance when the contract extends into more than one accounting period. ARB No. 45 requires disclosure of the method followed.

Statement of Position 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts

Statement of Position (SOP) 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*, provides more detailed guidance on the application of ARB No. 45. It expands the scope

to include accounting for the performance of contracts for which specifications are provided by the customer for the construction of facilities or the production of goods or for the provision of related services. SOP 81-1 states that use of the percentage-of-completion or the completed-contract method of accounting should not be acceptable alternatives for the same circumstances. Determination of which of the two methods is preferable should be based on a careful evaluation of the circumstances. It identifies the circumstances appropriate to each of the methods, the bases of applying the methods, and the reasons for the recommendations.

Percentage-of-Completion Method. SOP 81-1 concludes that the percentage-of-completion method is the preferable accounting policy when reasonably dependable estimates of the extent of progress toward completion, contract revenues, and contract costs can be made. Paragraph 23 also requires that all of the following conditions exist.

- Contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement.
- The buyer can be expected to satisfy his obligations under the contract.
- The contractor can be expected to perform his contractual obligations.

SOP 81-1 states that the ability to produce reasonably dependable estimates is an essential element of the contracting business and persuasive evidence to the contrary is necessary to overcome that presumption. A contractor's estimates of total contract revenue and total contract costs should be regarded as reasonably dependable if the minimum total revenue and the maximum total cost can be estimated with a sufficient degree of confidence to justify the contractor's bid on contracts.

Completed-Contract Method. This method may be used in circumstances in which financial position and results of operations would not vary materially from those resulting from the use of the percentage-of-completion method, for example, when an entity has primarily short-term contracts. The completed-contract method is preferable in circumstances in which estimates cannot meet the criteria for reasonable dependability or in which there are inherent hazards. Examples of inherent hazards are contracts whose validity is seriously in question (that is, which are less than fully enforceable), contracts whose completion may be subject to the outcome of pending legislation or pending litigation, or contracts exposed to the possibility of the condemnation or expropriation of the resulting properties.

Determining the Profit Center. The basic presumption should be that each contract is the profit center for revenue recognition, cost accumulation, and income measurement. That presumption may be

overcome only if a contract or a series of contracts meets the conditions described for combining or segmenting contracts. Combining contracts for profit recognition purposes may occur when a group of contracts are so closely related that they are, in effect, parts of a single project with an overall profit margin, such as when a group of contracts have been negotiated as a package with the objective of achieving an overall profit. In SOP 81-1, paragraphs 37 and 38 detail specific criteria that must be met for contracts to be combined for accounting purposes.

A single contract or a group of contracts that otherwise meet the test for combining may include several elements or phases, each of which the contractor negotiated separately with the same customer and agreed to perform without regard to the performance of the others. A project consisting of a single contract or a group of contracts with segments that have different rates of profitability may be segmented if it meets specific criteria described in paragraphs 40, 41, or 42 of SOP 81-1.

Measuring Progress on Contracts. The meaningful measurement of the extent of progress toward completion is essential because this factor is used in determining the amounts of estimated contract revenue and the estimated gross profit that will be recognized in any given period. A number of acceptable methods are used including cost-to-cost, efforts-expended, units-of-delivery, and units-of-work-performed. Use of any given method depends on whether input measures (terms of efforts devoted to a contract) or output measures (terms of results achieved) are used. Output measures are generally the best method of progress toward completion but often they cannot be established and input measures must be used. The methods selected should be applied consistently to all contracts having similar characteristics. The acceptability of the results of input or output measures should be periodically reviewed and confirmed by alternative measures that involve observation and inspection, perhaps by comparison to results of calculations based on physical observations by engineers, architects, or similarly qualified personnel.

Computation of Income Earned Under the Percentage-of-Completion Method. Total estimated gross profit on a contract, the difference between total estimated contract revenue and total estimated contract cost, must be determined before the amount earned on the contract for a period can be determined. The portion of total revenue earned or the total amount of gross profit earned to date is determined by the measurement of the extent of progress toward completion using one of the methods discussed above. The computation of income earned for a period involves a determination of the portion of total estimated contract revenue that has been earned to date (earned revenue) and the portion of total estimated contract cost related to that revenue (cost of earned

revenue). SOP 81-1 discusses two acceptable alternative approaches to determining earned revenue and cost of earned revenue.

Revised Estimates. Estimates of contract revenue, costs to complete, and the extent of progress toward completion must be continually reevaluated throughout the life of a contract. SOP 81-1 requires changes in estimates to be accounted for in the period of change as described in paragraph 31(a) of Accounting Principles Board (APB) Opinion No. 20, *Accounting Changes.*

Provisions for Anticipated Losses on Contracts. SOP 81-1 states that provisions for losses should be made in the period in which they become evident under either the percentage-of-completion method or the completed-contract method.

Disclosures. SOP 81-1 requires disclosure of the basic method of accounting used for contracts; departures from the basic accounting policy; methods of measuring extent of progress toward completion for contracts accounted for using the percentage-of-completion method; and specific criteria used to determine when a contract is substantially completed for contracts accounted for using the completed-contract method. It notes that APB Opinion 20 recommends disclosure of the effect of significant revisions of estimates if the effect is material.

Software Revenue Recognition

SOP 97-2, *Software Revenue Recognition*, as amended by SOP 98-9, *Modification of SOP 97-2,* Software Revenue Recognition, *With Respect to Certain Transactions*, provides guidance on applying GAAP in recognizing revenue on software transactions. Key provisions are discussed below.

If an arrangement to deliver software or a software system does not require significant production, modification, or customization of software, revenue should be recognized when all of the following criteria are met.

- Persuasive evidence of an arrangement exists.
- Delivery has occurred.
- The vendor's fee is fixed or determinable.
- Collectibility is probable.

Persuasive Evidence of an Arrangement Exists

If the vendor has a customary business practice of utilizing written contracts, evidence of the arrangement is provided only by a contract signed by both parties. Vendors that do not rely on signed contracts should have other forms of evidence to document the transaction, such

as a purchase order or on-line authorization. Even if all other requirements in the SOP for recognition of revenue are met (including delivery), revenue should not be recognized on any element of the arrangement unless persuasive evidence of an arrangement exists.

Delivery Has Occurred

The principle of not recognizing revenue before delivery applies whether the customer is a user or a reseller. For software that is delivered electronically, delivery has been met when the customer takes possession of the software via a download or has been provided with access codes that allow the customer to take immediate possession of the software on its hardware pursuant to an agreement or purchase order for the software.

If uncertainty exists about customer acceptance after delivery, license revenue should not be recognized until acceptance occurs. Delivery should not be considered complete unless the destination is the customer's place of business or another site specified by the customer. If the customer specifies an intermediate site, but a substantial portion of the fee is not payable until the delivery by the vendor to another site specified by the customer, revenue should not be recognized until delivery is made to that other site. Revenue from transactions involving delivery agents of the vendor should be recognized when the software is delivered to the customer, not to the delivery agent.

The Vendor's Fee Is Fixed or Determinable and Collectibility Is Probable

A software licensing fee is not fixed or determinable if it is based on the number of units distributed or copied, or the expected number of users of the product. If an arrangement includes rights of return or rights to refunds without return, conditions that must be met for the vendor to recognize revenue include that the amount of future returns or refunds can be reasonably estimated in accordance with FASB Statement No. 48. *Any* extended payment terms may indicate that the fee is not fixed or determinable. If payment of a significant portion of the fee is not due until after expiration of the license or more than twelve months after delivery, the licensing fee should be *presumed* not to be fixed or determinable unless the vendor can demonstrate a standard business practice of using long-term or installment contracts and a history of successfully collecting under the original payment terms without making concessions. If it cannot be concluded that a fee is fixed or determinable at the outset of an arrangement, revenue should be recognized as payments become due.

For reseller arrangements, factors such as the following may indicate that the fixed or determinable fees and collectibility criteria have not been met.

- Payment is substantially contingent on the reseller's success in distributing the product.
- Resellers may not be able to honor a commitment to make fixed and determinable payments until they collect cash from their customers.
- Uncertainties indicate the amount of future returns cannot be reasonably estimated.
- Distribution arrangements with resellers require the vendor to rebate or credit a portion of the fee if the vendor subsequently reduces its price for a product and the reseller still has rights with respect to that product (price protection).

Fees from licenses cancelable by the customer are neither fixed nor determinable until the cancellation privileges lapse. Fees from licenses with cancellation privileges that expire ratably over the license period are considered to become determinable ratably as the cancellation privileges lapse.

Contract Accounting

If an arrangement to deliver software or a software system, either alone or together with other products or services, requires significant production, modification, or customization of software, the entire arrangement should be accounted for in conformity with ARB No. 45, using the relevant guidance in SOP 81-1, unless criteria specified in SOP 97-2 for separate accounting for any service element are met. SOP 97-2 also provides guidance on the application of contract accounting in arrangements involving software.

Multiple-Element Arrangements

Software arrangements may consist of multiple elements, that is, additional software products, upgrades and enhancements, postcontract customer support (PCS), or services, including elements deliverable only on a when-and-if-available basis. If contract accounting does not apply, the vendor's fee must be allocated to the various elements based on vendor-specific objective evidence of fair values, regardless of any separate prices stated within the contract for each element.

Vendor-specific objective evidence of fair value is limited to the following:

- The price charged when the same element is sold separately
- For an element not yet being sold separately, the price established by management having the relevant authority

In accordance with SOP 98-4, *Deferral of the Effective Date of a Provision of SOP 97-2,* Software Revenue Recognition, as amended by SOP

98-9, *Modification of SOP 97-2,* Software Revenue Recognition, *With Respect to Certain Transactions,* this provision need not be applied to transactions entered into before fiscal years beginning after March 15, 1999.

If sufficient vendor-specific objective evidence of fair values does not exist for the allocation of revenue to the various elements of an arrangement, all revenue from the arrangement should be deferred until such sufficient evidence exists, or until all elements have been delivered. Exceptions to this guidance are provided for PCS, services that do not involve significant customization, subscriptions, and arrangements in which the fee is based on the number of copies. In addition, SOP 98-9 amends this guidance for multiple-element arrangements in which there is vendor-specific objective evidence of the fair values of *all* undelivered elements, and vendor-specific objective evidence of fair value does not exist for one or more of the delivered elements. In such circumstances, it requires recognition of revenue in accordance with the *residual method.* Under the residual method, the total fair value of the undelivered elements is deferred, and the difference between the total arrangement fee and the amount deferred for the undelivered elements is recognized as revenue related to the delivered elements. SOP 98-9 is effective for transactions entered into in fiscal years beginning after March 15, 1999, with earlier application permitted. Restatement of prior periods is prohibited.

The portion of the fee allocated to an element should be recognized as revenue when all of the revenue recognition criteria have been met. In applying those criteria, the delivery of an element is considered not to have occurred if there are undelivered elements that are essential to the functionality of any delivered elements. In addition, no portion of the fee (including amounts otherwise allocated to delivered elements) meets the criterion of collectibility if the portion of the fee allocable to delivered elements is subject to forfeiture, refund, or other concession if the undelivered elements are not delivered. In order for the revenue related to an arrangement to be considered not subject to forfeiture, refund, or other concession, management must intend not to provide refunds or concessions that are not required under the provisions of the arrangement. The vendor's historical pattern of making refunds or other concessions that were not required under the original provisions (contractual or other) of other arrangements should be considered more persuasive than terms included in the arrangement that indicate that no concessions are required.

Service Elements

Separate accounting for a service element of an arrangement is required if both of the following criteria are met.

- The services are not essential to the functionality of any other element of the transaction.
- The services are described in the contract such that the total price of the arrangement would be expected to vary as the result of the inclusion or exclusion of the services.

SOP 97-2 provides comprehensive guidance on different kinds of multiple-element arrangements, PCS, services, and contract accounting. In addition, it includes appendixes with examples of the application of certain provisions of the SOP and a flowchart illustrating a decision process for recognizing revenue on software arrangements.

Sales of Real Estate

FASB Statement No. 66, *Accounting for Sales of Real Estate*, establishes standards for recognition of profit on all real estate transactions without regard to the nature of the seller's business. It includes extensive guidance for the recognition of profit both for retail land sales and for real estate transactions that are not retail land sales. The general requirements for recognition of all the profit at the date of sale on real estate sales other than retail land sales are set forth in paragraphs 3 through 5 of the Statement and are summarized below. Similarly to SOP 97-2, the guidance in FASB Statement No. 66 demonstrates the application of the concept of recognizing revenue when *earned* and when *realized* or *realizable* to a specific subject matter.

For sales of real estate other than retail land sales, use of the *full accrual method*, that is, recognition of all of the profit at the date of sale, depends on the existence of the following two conditions: (a) the profit is determinable, that is, the collectibility of the sales price is reasonably assured or an uncollectible amount can be estimated, and (b) the earnings process is virtually complete, that is, the seller is not obligated to perform significant tasks after the sale to earn the profit. Part or all of the profit should be deferred until both conditions exist.

Collectibility is demonstrated by the buyer's commitment to pay as supported by substantial initial and continuing investments in the property such that the buyer's risk of loss through default motivates the buyer to honor the obligation to the seller.

Profit on real estate transactions should not be recognized by the full accrual method unless all of the following criteria are met.

- A sale is consummated, meaning that the parties are bound by the terms of a contract, all consideration has been exchanged, any permanent financing for which the seller is responsible has been arranged, and all conditions precedent to closing have been performed. These

four conditions usually are met at the time of closing, not when an agreement to sell has been signed or at a preclosing.

- The buyer's initial and continuing investments are adequate to demonstrate a commitment to pay for the property.
- The seller's receivable is not subject to future subordination.
- The seller has transferred to the buyer the usual risks and rewards of ownership in a transaction that is in substance a sale and does not have a substantial continuing involvement with the property.

FASB Statement No. 66 also provides guidance on accounting for sales of real estate in circumstances in which criteria for the full accrual method are not met and partial recognition of profit may be appropriate.

Financial Statement Disclosures

FASB Statement No. 57, Related Party Disclosures

FASB Statement No. 57 requires disclosures of material related-party transactions other than compensation arrangements, expense allowances, and other similar items in the ordinary course of business, unless the transactions are eliminated in the preparation of consolidated or combined financial statements. Transactions between related parties are considered to be related-party transactions even though they may not be given accounting recognition. Paragraph 2 states:

> The disclosures shall include:[3]
>
> a. The nature of the relationship(s) involved
>
> b. A description of the transactions, including transactions to which no amounts or nominal amounts were ascribed, for each of the periods for which income statements are presented, and such other information deemed necessary to an understanding of the effects of the transactions on the financial statements
>
> c. The dollar amounts of transactions for each of the periods for which income statements are presented and the effects of any change in the method of establishing the terms from that used in the preceding period
>
> d. Amounts due from or to related parties as of the date of each balance sheet presented and, if not otherwise apparent, the terms and manner of settlement

[3] In some cases, aggregation of similar transactions by type of related party may be appropriate. Sometimes, the effect of the relationship between the parties may be so pervasive that disclosure of the relationship alone will be sufficient. If necessary to the understanding of the relationship, the name of the related party should be disclosed.

Paragraph 3 states that transactions involving related parties cannot be presumed to be carried out on an arm's-length basis, and representations about related-party transactions should not imply that they were consummated on terms equivalent to arm's-length transactions unless such representations can be substantiated.

Paragraph 4 states that when a reporting enterprise is under common control with one or more other enterprises, the nature of that control relationship should be disclosed, even though there are no transactions between the enterprises, if the existence of that control could result in operating results or financial position of the reporting enterprise that differ significantly from those that would have been obtained if the enterprises were autonomous.

APB Opinion 22, Disclosure of Accounting Policies

APB Opinion 22 requires that a description of all significant accounting policies of the reporting entity should be included as an integral part of the financial statements. Disclosure of accounting policies should identify and describe the accounting principles followed by the reporting entity and the methods of applying those principles that materially affect the financial statements. Paragraph 12 states:

> In general, the disclosure should encompass important judgments as to appropriateness of principles relating to recognition of revenue and allocation of asset costs to current and future periods; in particular, it should encompass those accounting principles and methods that involve any of the following:
>
> a. A selection from existing acceptable alternatives;
>
> b. Principles and methods peculiar to the industry in which the reporting entity operates, even if such principles and methods are predominantly followed in that industry;
>
> c. Unusual or innovative applications of generally accepted accounting principles (and, as applicable, of principles and methods peculiar to the industry in which the reporting entity operates).

SOP 94-6, Disclosure of Certain Significant Risks and Uncertainties

SOP 94-6 requires entities to include in their financial statements disclosures about the nature of their operations and about the use of estimates in the preparation of financial statements. If certain criteria are met, it requires disclosures about certain significant estimates and the current vulnerability due to certain concentrations, for example, concentrations in the volume of business transacted with a particular customer or concentrations in revenue from particular products or services.

Other Sources

The "Resources" section at the end of this publication lists other sources of accounting guidance for revenue recognition that cover specific subject matter or that is industry-specific. It includes AICPA Industry Audit and Accounting Guides that provide auditing as well as accounting guidance.

In circumstances in which there is no specifically relevant authoritative accounting guidance and application by analogy does not seem appropriate, preparers and auditors may find it useful to refer to nonauthoritative sources such as AICPA Audit Risk Alerts and articles in the *Journal of Accountancy* or other professional publications.

A source of nonauthoritative guidance on revenue recognition is the FASB's 1978 Invitation to Comment, *Accounting for Certain Service Transactions.* It provides that revenue from service transactions should be recognized based on performance. If performance consists of a single act, revenue should be recognized when that act takes place. If performance consists of multiple acts, revenue should be recognized based on the proportionate performance of each act. If the proportion of services to be performed in the final act is so significant to the whole service transaction that performance cannot be deemed to have taken place until that act is performed, revenue should be recognized when that act takes place. If there is a significant degree of uncertainty regarding realization of service revenue, revenue should not be recognized until collection. The Invitation to Comment also discusses the recognition of revenue in service transactions that involve nonrefundable initiation fees with subsequent periodic payments for future services, and on nonrefundable fees for the installation of equipment that is essential to providing future services with subsequent periodic payments for the services.

The FASB considered the Invitation to Comment in the development of its Concept Statements, and subsequently the Emerging Issues Task Force (EITF) has addressed some of the issues (see the "Resources" section for a listing of EITF abstracts). Nevertheless, the Invitation to Comment was not further deliberated and its proposals are nonauthoritative.

INDICATORS OF IMPROPER REVENUE RECOGNITION

Management engages the independent auditor to express an opinion on the financial statements that management prepares in accordance with generally accepted accounting principles (GAAP). Auditors should be alert to indicators of improper revenue recognition that may require special attention in performing the audit. This section discusses "red flags" that may signal improper revenue recognition, including risk factors that relate to misstatements arising from fraudulent financial reporting, other issues that may require special consideration, and examples of specific transactions or events that may indicate improper accounting for revenue.

Risk Factors Relating to Misstatements Arising From Fraudulent Financial Reporting

Statement on Auditing Standards (SAS) No. 82, *Consideration of Fraud in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 316), requires the auditor to specifically assess the risk of material misstatement due to fraud. It identifies examples of risk factors that relate to misstatements arising from fraudulent financial reporting and groups them into the following categories:

- Management's characteristics and influence over the control environment
- Industry conditions
- Operating characteristics and financial stability

Risk factors from each category that are particularly relevant to revenue recognition are summarized below.

Management Characteristics and Influence Over the Control Environment

The COSO Report states that the control environment, including factors such as integrity and ethical values, and management's philosophy and operating style, sets the tone of an organization and is the foundation for all other components of internal control. Examples of risk factors relating to management's characteristics and influence over the control environment that are particularly relevant to revenue recognition include the following.

- Management has a motivation to engage in fraudulent financial reporting. Specific indicators might be the following.

— A significant portion of management's compensation is represented by bonuses, stock options, or other incentives, the value of which is contingent upon the entity achieving unduly aggressive targets for operating results, financial position, or cash flow.

— Management is excessively interested in maintaining or increasing the entity's stock price or earnings trend through the use of unusually aggressive accounting practices.

— Management makes a practice of committing to analysts, creditors, and other third parties to achieve what appear to be unduly aggressive or clearly unrealistic forecasts.

- Management fails to display and communicate an appropriate attitude regarding internal control and the financial reporting process.

Risk factors relating to management's characteristics and influence over the control environment may vary depending on the nature of the business or the size of the entity. For example, management of a smaller entity may be motivated to engage in fraudulent financial reporting of revenue if failure to maintain a certain level of market capitalization or equity may trigger suspension from trading on a securities exchange.

Industry Conditions

The economic environment in which an entity operates may heighten the risk of misstatements of revenue arising from fraudulent financial reporting. Examples of risk factors relating to industry conditions include the following.

- There is a high degree of competition or market saturation, accompanied by declining margins.
- The industry is highly vulnerable to rapidly changing technology or rapid product obsolescence.
- There has been a general economic downturn in the industry, making it difficult to achieve budgeted or forecasted results.

Operating Characteristics and Financial Stability

The nature and complexity of the entity, its financial condition, and its profitability also may heighten the risk that the entity will engage in fraudulent financial reporting of revenue. Examples of risk factors relating to operating characteristics and financial stability include the following.

- There is an inability to generate cash flows from operations while reporting earnings and earnings growth.
- Assets, liabilities, revenues, or expenses are based on significant estimates that involve unusually subjective judgments or uncertainties, or that are subject to potential significant change in the near term in

a manner that may have a financially disruptive effect on the entity. These might include ultimate collectibility of receivables, timing of revenue recognition, realizability of financial instruments based on the highly subjective valuation of collateral or difficult-to-assess repayment sources, or significant deferral of costs.

- Unusually rapid growth or profitability occurs, especially compared with that of other companies in the same industry.
- Loss of a major customer has created pressure to replace revenues and earnings.

Other Issues Requiring Consideration

Side Agreements

Side agreements are used to alter the terms and conditions of recorded sales transactions to entice customers to accept the delivery of goods and services. They may create obligations or contingencies relating to financing arrangements or to product installation or customization that may relieve the customer of some of the risks and rewards of ownership. Frequently, side agreements are hidden from the entity's board of directors and outside auditors, and only a very few individuals within an entity are aware that they exist.

Side agreements appear to be prevalent in high technology industries, particularly the computer hardware and software segments. The terms they provide may preclude revenue recognition.

Channel Stuffing

Distributors and resellers sometimes delay placing orders until the end of a quarter in an effort to negotiate a better price on purchases from suppliers that they know want to report good sales performance. This practice may result in a normal pattern of increased sales volume at the end of a reporting period. An unusual volume of sales to distributors or resellers, particularly at or near the end of the reporting period, may indicate channel stuffing. Channel stuffing (also known as *trade loading*) is a marketing practice that suppliers sometimes use to boost sales by inducing distributors to buy substantially more inventory than they can promptly resell. Inducements to overbuy may range from deep discounts on the inventory to threats of losing the distributorship if the inventory is not purchased. Channel stuffing without appropriate provision for sales returns is an example of booking tomorrow's revenue today in order to window-dress financial statements. Channel stuffing also may be accompanied by side agreements with distributors that essentially negate some of the sales by providing for the return of unsold merchandise beyond the normal sales return privileges. Even when there is no evidence of side agree-

ments, channel stuffing may indicate the need to increase the level of anticipated sales returns above historical experience.

Related-Party Transactions and Significant Unusual Transactions

Related-party transactions require special consideration because related parties may be difficult to identify and related-party transactions may pose significant "substance over form" issues. Undisclosed related-party transactions may be used to fraudulently inflate earnings. Examples include the recording of sales of the same inventory back and forth among affiliated entities that exchange checks periodically to "freshen" the receivables, and sales with commitments to repurchase that, if known, would preclude recognition of revenue. Although unusual material transactions, particularly close to year end, may be an indicator of related-party transactions, a series of sales may be executed with an undisclosed related party that individually are insignificant but in total are material.

Significant, unusual, or highly complex transactions resulting in revenue recognition that are executed with customers who are not related parties similarly require special consideration because they also may pose "substance over form" questions and may involve the collusion of the entity and the customer in a fraudulent revenue recognition scheme.

Nature of Business and Accounting for Revenue

Improper revenue recognition is not confined to any single industry. Risk factors also differ depending on the nature of the product or service and its distribution. Products that are sold to distributors for resale pose different risks than products or services that are sold to end-users. Sales in high technology industries where rapid product obsolescence is a significant issue pose different risks than sales of inventory with a longer life, such as farm or construction equipment, automobiles, trucks, and appliances. Although generally accepted accounting principles broadly govern revenue recognition, how those principles are applied in specific circumstances varies from industry to industry.

In gaining an understanding of the nature of the entity's business, the auditor might consider factors that are relevant to the entity's revenue recognition such as the following:

- The appropriateness of an entity's application of accounting principles in the context of the industry in which it operates
- Whether there has been a change in the company's revenue recognition policy and, if so, why

- The company's practice with regard to sales and payment terms, and whether there are deviations from industry norms or from the entity's own practices such as the following:
  - Sales terms that do not comply with the company's normal policies
  - The existence of longer than expected payment terms or installment receivables
  - The use of nonstandard contracts or contract clauses with regard to sales
- Practices with regard to the shipment of inventory that could indicate the potential for misstatements of revenue or that could have other implications for the audit, such as the following.
  - The company's shipping policy is inconsistent with previous years. For example, if an entity ships unusually large quantities of product at the end of an accounting period, it may indicate an inappropriate cutoff of sales. Alternatively, if a company that normally ships around-the-clock has stopped shipments one or two days before the end of the current accounting period, it may indicate that management is abandoning its normal operating policies in an effort to manage earnings, which may have broader implications for the audit.
  - Shipments recorded as revenue are sent to third-party warehouses rather than to customers.
  - Shipments recorded as revenue result from billing for demonstration products that already are in the field.

Integrity of Evidence

Another issue requiring special consideration is the completeness and integrity of the entity's evidential matter supporting revenue recognition. Indicators that revenue may have been improperly recorded include—

- Responses from management or employees to inquiries about sales transactions or about the basis for estimating sales returns that are inconsistent, vague, or implausible.
- Documents to support sales transactions are missing.
- Bills of lading have been signed by company personnel rather than a common carrier.
- Documents such as shipping logs or purchase orders have been altered.

SAS No. 82, discussed in the section entitled "Auditing Revenue Assertions," provides guidance on how the auditor's judgment about

the risk of material misstatement due to fraud may affect the conduct of the audit.

Potential Accounting Misstatements

This section discusses specific indicators relating to sales transactions that may evidence improper revenue recognition. A number of these examples represent obvious misstatements (and fraud as well). Others are transactions that merit further investigation to determine whether or not revenue has been improperly recorded. The indicators are categorized into sales that may fail as a result of the absence of an agreement, lack of delivery, or an incomplete earnings process.

Absence of an Agreement

A sale has not taken place if there is no actual, firm agreement between seller and buyer. Examples of obvious bogus sales are sales to nonexistent customers, sales to existing customers in which terms such as quantities or prices have been altered, and shipments on canceled or duplicate orders. Indicators of sales that may be improperly recorded because of lack of agreement between buyer and seller include the following:

- The use of letters of intent in lieu of signed contracts or agreements
- Sales of merchandise that is shipped in advance of the scheduled shipment date without evidence of the customer's agreement or consent or documented request for such shipment
- Sales recorded upon shipment of a product to customers who have been given a free tryout period after which the customer can return the product with no obligation
- Recognition of sales when customers have unilateral cancellation or termination provisions
- Sales in which evidence indicates the customer's obligation to pay for the product is contingent on the following:
  - — Resale to another (third) party (for example, sale to distributor, or consignment sale)
  - — Receipt of financing from another (third) party

Lack of Delivery

FASB Concepts Statement No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises*, states that revenues from manufacturing and selling activities are commonly recognized at the time of sale, usually meaning delivery. Indicators that delivery may not have occurred include the following.

- Sales are billed to customers prior to the delivery of goods and held by the seller (*bill and hold* or *ship in place* sales).
- Shipments are made after the end of the period (books kept open to record revenue for products shipped after the end of the period do not satisfy the delivery criterion for the current period).
- Shipments are made to a warehouse or other intermediary location without the instruction of the customer.
- Goods are preinvoiced prior to or in the absence of actual shipment.
- Partial shipments are made in which the portion not shipped is a critical component of the product.
- Purchase orders are recorded as completed sales.

Incomplete Earnings Process

FASB Concepts Statement No. 5 states that revenues are not recognized until earned. Indicators that sales have been recorded before the revenue has been earned include the following.

- There are sales in which evidence indicates the customer's obligation to pay for the merchandise depends on fulfillment by the seller of material unsatisfied conditions.
- Goods are preinvoiced while still in the process of being assembled.
- Shipments are sent to and held by freight forwarders pending return to the company for required customer modifications.
- There are sales that require substantial continuing vendor involvement after delivery of merchandise (for example, software sales requiring installation, debugging, extensive modifications, other significant support commitments).

AUDITING REVENUE ASSERTIONS

The objective of an audit of financial statements conducted in accordance with generally accepted auditing standards (GAAS) is to express an opinion on the financial statements. GAAS require that the auditor plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud.

No audit can be designed to provide absolute assurance that all revenue recorded by the client is appropriate or that fraudulent financial reporting is discovered. Nevertheless, an awareness of the conditions that increase audit risk, along with an appropriately skeptical response to issues identified during the planning process and during the performance of significant fieldwork, can help auditors increase the likelihood that either inadvertent or intentional material misstatements of revenue will be detected.

Revenue recognition issues continue to pose significant audit risk to auditors. The auditor's understanding of the entity's business—how it earns revenue, who is involved in the revenue process, how its controls over revenue transactions may be overridden, and what its motivation to misstate revenue may be—is essential to reducing that risk. Auditors need to pay particular attention to warning signals, such as those discussed herein in the section entitled "Indicators of Improper Revenue Recognition," that can be indicative of improper revenue recognition practices. To achieve the audit objective and satisfy the auditor's responsibility, the audit needs to be planned and executed with an appropriate degree of professional skepticism.[4] Additional audit procedures directed to the audit of revenues also may be needed to reduce the risk of failing to detect material misstatement of the financial statements to an acceptably low level. This section summarizes both authoritative and nonauthoritative guidance to help auditors achieve that objective.

THE AUDIT RISK MODEL

SAS No. 47, *Audit Risk and Materiality in Conducting an Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 312.12), states that "the auditor should consider audit risk and materiality both in (a) planning the audit

[4] Professional skepticism is characterized as "an attitude that includes a questioning mind and a critical assessment of audit evidence. The auditor uses the knowledge, skill, and ability called for by the profession of public accounting to diligently perform, in good faith and integrity, the gathering and objective evaluation of evidence." See "Due Professional Care in the Performance of Work" (AICPA, *Professional Standards*, vol. 1, AU sec. 230.07).

and designing auditing procedures and (b) evaluating whether the financial statements taken as a whole are presented fairly, in all material respects, in conformity with generally accepted accounting principles."

Audit risk is the risk that the auditor may unknowingly fail to appropriately modify his or her opinion on financial statements that are materially misstated. Financial statements are materially misstated when they contain misstatements whose effect, individually or in the aggregate, is important enough to cause them not to be presented fairly, in all material respects, in conformity with generally accepted accounting principles (GAAP). The auditor's consideration of materiality is a matter of professional judgment and is influenced by his or her perception of the needs of a reasonable person who will rely on the financial statements.

The auditor should plan the audit so that audit risk will be limited to a low level that is, in his or her professional judgment, appropriate for expressing an opinion on the financial statements.

The nature, timing, and extent of the procedures to be applied on a particular engagement are a matter of the auditor's professional judgment, based on the specific circumstances. However, the procedures adopted should be adequate to achieve the auditor's specific objectives and reduce detection risk to a level acceptable to the auditor. The evidential matter obtained should be sufficient for the auditor to form conclusions concerning the validity of the individual assertions embodied in the components of financial statements, and should provide a reasonable basis for his or her opinion.

An audit of financial statements is a cumulative process. The auditor may identify fraud risk factors or related-party transactions or other information relevant to the audit while performing procedures relating to acceptance or continuance of clients and engagements, during engagement planning, while obtaining an understanding of an entity's internal control, or while conducting fieldwork. Such information may alter the auditor's judgment about the levels of inherent and control risks and his or her preliminary judgment about materiality. In such cases, the auditor may need to reevaluate the nature, timing, and extent of auditing procedures he or she plans to apply, based on the revised consideration of audit risk and materiality, for all or certain of the account balances or classes of transactions and related assertions.

Knowledge of the Business

SAS No. 22, *Planning and Supervision* (AICPA, *Professional Standards*, vol. 1, AU sec. 311.06) states:

The auditor should obtain a level of knowledge of the entity's business that will enable him to plan and perform his audit in accordance with generally accepted auditing standards. That level of knowledge should enable him to obtain an understanding of the events, transactions, and practices that, in his judgment, may have a significant effect on the financial statements. The level of knowledge customarily possessed by management relating to managing the entity's business is substantially greater than that which is obtained by the auditor in performing the audit. Knowledge of the entity's business helps the auditor in:

a. Identifying areas for special consideration.

b. Assessing conditions under which accounting data are produced, processed, reviewed, and accumulated within the organization.

c. Evaluating the reasonableness of estimates, such as valuation of inventories, depreciation, allowances for doubtful accounts, and percentage of completion of long-term contracts.

d. Evaluating the reasonableness of management representations.

e. Making judgments about the appropriateness of the accounting principles applied and the adequacy of disclosures.

The auditor's understanding of the client's business, its organization, and its operating characteristics is critical for planning and performing an effective audit. With regard to assertions about revenue, the understanding would include, where significant, the following matters:

- The kinds of products and services sold
- Whether seasonal or cyclical variations in revenue may be expected
- The marketing and sales policies customary for the client and the industry
- Policies regarding pricing, sales returns, discounts, extension of credit, and normal delivery and payment terms
- Who, particularly in the marketing and sales functions, is involved with processes affecting revenues including order entry, extension of credit, and shipping
- Whether there are compensation arrangements that depend upon the company's recording of revenue; for example, whether the sales force is paid commissions based on sales invoiced or sales collected, and the frequency with which sales commissions are paid, might have an effect on the recording of sales at the end of a period

An understanding of the classes and categories of the entity's customers—whether there are sales to distributors or value-added resellers or to related parties—is important. For example, if sales to distributors are material, the auditor would need to understand whether concessions have been made in the form of return product rights or other

arrangements in the distribution agreements the company has entered into. For example, distribution agreements in the high technology industry might include terms such as price protection, rights of return for specified periods, rights of return for obsolete product, and cancellation clauses, such that the real substance of the agreement is that it results in consignment inventory.

Other factors that may be relevant to the auditor's understanding include whether the client assists distributors in placing product with end-users, and how the company manages, tracks, and controls its inventory that is held by distributors. For example, the company may take physical inventories of product held by distributors or receive periodic inventory reports from distributors that are reconciled to the company's records.

The auditor should understand the accounting principles that are appropriate for the client's sales transactions, including special industry practices. In considering the appropriateness of recognizing revenue on sales to distributors, for example, the auditor should bear in mind that a sale is not final until the customer accepts the product and the risks and rewards of ownership have been transferred to the buyer.

Until the auditor understands the business sense of material transactions, he or she cannot complete the audit. If the auditor lacks specialized knowledge to understand a particular transaction, he or she should consult with persons who do have the requisite knowledge.

Auditors may find procedures such as those described below useful in obtaining knowledge about an entity's sales transactions.

Inquiry

Inquiry of management is an effective auditing procedure in obtaining a knowledge of the entity and its internal controls. In situations involving unusual or complex revenue transactions, the auditor should consider making inquiries of representatives of the client's sales, marketing, customer service and returns departments, and other client personnel familiar with the transactions to gain an understanding of the nature of the transactions and any special terms that may be associated with them. Inquiries of legal staff also may be appropriate when sales contracts have nonstandard, unusual, or complex terms. Inquiry alone is not a sufficient auditing procedure, but information obtained from discussions with management and entity personnel may help the auditor identify matters that need to be corroborated with evidence obtained from other procedures, including confirmation from independent sources outside the entity.

Reading and Understanding Contracts

Reading and understanding the terms of sales contracts will help the auditor obtain an understanding of what the customer expects and what the company is committed to provide. In addition, reading the contents of the company's sales contract (and sales correspondence) files may provide evidence of side agreements.

Assignment of Personnel and Supervision

SAS No. 22 also discusses the supervision of personnel who are involved in the audit. An understanding of a client's business, its accounting policies and procedures, and the nature of its transactions with customers is useful in assessing the extent of experience or supervision required of the personnel assigned to audit revenue transactions. SAS No. 47, in AU sec. 312.17, states the following.

> The knowledge, skill, and ability of personnel assigned significant engagement responsibilities should be commensurate with the auditor's assessment of the level of risk for the engagement. Ordinarily, higher risk requires more experienced personnel or more extensive supervision by the auditor with final responsibility for the engagement during both the planning and the conduct of the engagement.

Unusual or complex transactions, related-party transactions, and sales transactions based on contracts with complex terms may signal the need for more experienced personnel assigned to those segments of the engagement, more extensive supervision, or the use of industry or other specialists.

Consideration of Internal Control Over Revenue Recognition

The COSO Report broadly defines internal control as a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives including reliable financial reporting. (See the section entitled "Responsibility for Reliable Reporting.")

SAS No. 55, *Consideration of Internal Control in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 319.19) states the following.

> In all audits, the auditor should obtain an understanding of each of the five components of internal control sufficient to plan the audit by performing procedures to understand the design of controls relevant to

an audit of financial statements, and whether they have been placed in operation. In planning the audit, such knowledge should be used to—

- Identify types of potential misstatement.
- Consider factors that affect the risk of material misstatement.
- Design substantive tests.

The auditor's understanding of internal control over revenue transactions would include the client's policies and procedures for receiving and accepting orders, extending credit, shipping goods, relieving inventory, billing and recording sales transactions, receiving and recording sales returns, and authorizing and issuing credit memos. This understanding also would include whether the entity has procedures for determining the proper cutoff of sales at the end of the accounting period. It also is important for the auditor to have an understanding of the computer applications and key documents (for example, purchase orders, shipping reports, bills of lading, invoices, credit memos) used during the processing of revenue transactions.

SAS No. 55, AU sec. 319.41, states that the auditor's knowledge of the design and operation of internal controls ordinarily is obtained through procedures such as inquiries of appropriate management, supervisory, and staff personnel; inspection of entity documents and records; and observation of entity activities and operations. For example, the auditor might obtain a knowledge of the design and operation of internal controls over the extension of credit to customers by performing procedures such as the following.

- Inquire of the credit manager and other credit department personnel about the entity's documented policies for approving sales orders before a shipping or production order is generated, including how—
  - — New customers' creditworthiness is determined.
  - — Standing customers' credit limits are established and reviewed.
  - — Exceptions are handled if orders outside predetermined limits are received.
  - — Management monitors the functioning of controls over the extension of credit.
- Inspect the documents that are used in various steps of the credit authorization process.
- Observe how the authorization of orders is executed by credit department personnel.

The auditor's understanding of internal control also would include information such as how the company monitors its sales contracts. Relevant aspects of this include the company's policy about management

or other personnel who are authorized to approve nonstandard contract clauses; whether those personnel understand the accounting implications of changes to contractual clauses; and whether the entity enforces its policies regarding negotiation and approval of sales contracts and investigates exceptions. A lack of documented policies may give rise to a lack of compliance or inconsistent compliance with stated policies.

A sufficient understanding of the client's application of accounting principles, given the nature of its sales transactions, is essential. The auditor needs to obtain an understanding of the client's financial reporting process to prepare the financial statements, including disclosures. This understanding would include how the client develops significant estimates, such as reserves for sales returns and allowances for doubtful accounts. It also would include considering the company's procedures for accounting for and disclosing related-party transactions. (See the discussion entitled "Transactions With Related Parties," which follows.)

Assessing control risk is the process of evaluating the *effectiveness* of an entity's internal control in preventing or detecting material misstatements in the financial statements. SAS No. 55 requires the auditor who assesses control risk at below the maximum to obtain sufficient evidential matter to support that assessed level. Because of the limitations inherent in any internal control system, there is always some risk that controls may fail or may be overridden, especially at the end of a reporting period. SAS No. 55 requires the auditor to perform substantive tests for significant account balances and transaction classes, regardless of the assessed level of control risk.

If evidence is obtained that operation of a control is ineffective, the assurance provided from substantive tests should increase. For example, if the auditor discovers that the entity's approval process for nonstandard sales contracts is ineffective, he or she may decide to confirm contract terms with major customers. If the auditor determines that a control has been intentionally overridden, SAS No. 82, discussed below, provides guidance on how the audit may be affected.

Consideration of Fraud in a Financial Statement Audit

SAS No. 82, *Consideration of Fraud in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 316), requires that the auditor specifically assess the risk of material misstatement of the financial statements due to fraud and consider that assessment in designing the audit procedures to be performed. Fraud risk factors that are particularly relevant to the fraudulent financial reporting of revenue were discussed in the section entitled "Indicators of Improper Revenue Recognition." SAS No. 82, AU sec. 316.13, also states the following.

As part of the risk assessment, the auditor also should inquire of management (*a*) to obtain management's understanding regarding the risk of fraud in the entity and (*b*) to determine whether they have knowledge of fraud that has been perpetrated on or within the entity. Information from these inquiries could identify fraud risk factors that may affect the auditor's assessment and related response. Some examples of matters that might be discussed as part of the inquiry are (*a*) whether there are particular subsidiary locations, business segments, types of transactions, account balances, or financial statement categories where fraud risk factors exist or may be more likely to exist and (*b*) how management may be addressing such risks.

SAS No. 82, AU sec. 316.27, notes that the auditor's judgments about the risk of material misstatement due to fraud may affect the audit in the ways discussed below.

Professional Skepticism

The application of professional skepticism in response to the auditor's assessment of the risk of material misstatement due to fraud might include (*a*) increased sensitivity in the selection of the nature and extent of documentation to be examined in support of material transactions, and (*b*) increased recognition of the need to corroborate management explanations or representations concerning material matters—such as further analytical procedures, examination of documentation, or discussion with others within or outside the entity.

Accounting Principles and Policies

The auditor may decide to consider further management's selection and application of significant accounting policies, particularly those related to revenue recognition. The auditor may have a greater concern about whether the accounting principles selected and policies adopted are being applied in an inappropriate manner to create a material misstatement of the financial statements.

Controls

When a risk of material misstatement due to fraud relates to risk factors that have control implications, the auditor's ability to assess control risk below the maximum may be reduced. The auditor's consideration of internal control would need to include an added sensitivity to management's ability to override such controls.

SAS No. 82, AU sec. 316.30, gives the following example of a specific response to the auditor's assessment of the risk of material misstatement arising from fraudulent financial reporting of revenue.

> If there is a risk of material misstatement due to fraud that may involve or result in improper revenue recognition, it may be appropriate to confirm with customers certain relevant contract terms and the absence of side agreements—inasmuch as the appropriate accounting is often influenced by such terms or agreements. For example, acceptance criteria, delivery and payment terms and the absence of future or continuing vendor obligations, the right to return the product, guaranteed resale amounts, and cancellation or refund provisions often are relevant in such circumstances. [Footnote omitted]

SAS No. 82 also notes that the nature, timing, and extent of audit procedures may need to be modified in response to the auditor's assessment of the risk of material misstatement due to fraud. It includes specific examples of responses that are included in the discussion of various auditing procedures throughout this section.

TRANSACTIONS WITH RELATED PARTIES

SAS No. 45, *Related Parties* (AICPA, *Professional Standards*, vol. 1, AU sec. 334), provides guidance on procedures to obtain evidential matter on related-party relationships and transactions that must be disclosed in accordance with FASB Statement No. 57. (See the section entitled "Summary of Selected Accounting Literature on Revenue Recognition.") AU sec. 334.02 states that "the auditor should be aware that the substance of a particular transaction could be significantly different from its form and that financial statements should recognize the substance of particular transactions rather than merely their legal form." In the absence of evidence to the contrary, transactions with related parties should not be assumed to be outside the ordinary course of business. The auditor, however, should be aware of the possibility that transactions with related parties may have been motivated by conditions such as an urgent desire for a continued favorable earnings record in the hope of supporting the price of the company's stock, or significant obsolescence dangers because the company is in a high-technology industry.

SAS No. 45, AU sec. 334.08, describes examples of procedures for identifying material transactions with parties known to be related and for identifying material transactions that may indicate the existence of previously undetermined relationships. Among the procedures are the following.

- Review proxy and other material filed with the Securities and Exchange Commission and comparable data filed with other regulatory agencies for information about material transactions with related parties.

- Review conflict-of-interests statements obtained by the company from its management.
- Review the extent and nature of business transacted with major customers, suppliers, borrowers, and lenders for indications of previously undisclosed relationships.
- Review accounting records for large, unusual, or nonrecurring transactions or balances, paying particular attention to transactions recognized at or near the end of the reporting period.

SAS No. 45 requires the auditor to place emphasis on testing material transactions with parties he or she knows are related to the reporting entity. It states that procedures should be directed toward obtaining and evaluating sufficient competent evidential matter and should extend beyond inquiry of management. The following are among the procedures that should be considered to obtain satisfaction concerning the purpose, nature, and extent of related-party transactions and their possible effect on revenue recognition.

- Obtain an understanding of the business purpose of the transaction.
- Examine invoices, executed copies of agreements, contracts, and other pertinent documents, such as receiving reports and shipping documents.
- Determine whether the transaction has been approved by the board of directors or other appropriate officials.
- Confirm the transaction amount and terms, including guarantees and other significant data, with the other party or parties to the transaction.
- Refer to financial publications, trade journals, credit agencies, and other information sources when there is reason to believe that unfamiliar customers, suppliers, or other business enterprises with which material amounts of business have been transacted may lack substance.
- With respect to material uncollected balances, guarantees, and other obligations, obtain information about the financial capability of the other party or parties to the transaction. Such information may be obtained from audited or unaudited financial statements, tax returns, reports issued by regulatory agencies or taxing authorities, financial publications, or credit agencies.

The auditor should consider whether he or she has obtained sufficient competent evidential matter to understand the relationship of the parties and the effects of related-party transactions on the financial statements.

Analytical Procedures

SAS No. 56, *Analytical Procedures* (AICPA, *Professional Standards*, vol. 1, AU sec. 329), requires the use of analytical procedures in the planning and review phases of the audit. Analytical procedures also may be used as substantive tests, although SAS No. 56 notes that they may not be as effective or efficient as tests of details in providing the desired level of assurance for some assertions.

Analytical procedures involve the comparisons of recorded amounts, or ratios developed from the recorded amounts, to expectations developed by the auditor. The auditor's expectations may be developed from a variety of sources including the financial information for comparable prior periods, anticipated (budgetary) results, and information regarding the industry in which the client operates and its normal business practices with regard to sales and distribution. For analytical procedures to be effective, the expectation should be precise enough to provide the desired level of assurance that differences that may be potential material misstatements, individually or when aggregated with other misstatements, would be identified for the auditor to investigate.

An objective of applying analytical procedures in the planning phase of the audit is to identify areas that may represent specific risks relevant to the audit, such as the existence of unusual transactions and events, and amounts, ratios, and trends that might indicate matters that have financial statement and audit planning ramifications. The following analytical procedures are particularly useful in identifying unusual fluctuations in the revenue cycle that warrant additional consideration. Depending on the presence of risk factors and other judgments made during audit planning, the auditor may wish to perform one or more of the following procedures.

- Compare monthly and quarterly sales by location and by product line with sales of the preceding comparable periods and for comparable periods in prior years. Consider whether the results are consistent with other known information such as expanding or declining markets, changes in sales price mix, and new or discontinued product lines. Comparison of weekly and daily sales may be appropriate for certain periods such as the last month or week of the year.
- Analyze the ratio of sales in the last month or week to total sales for the quarter or year.
- Compare revenues recorded daily for periods shortly before and after the end of the audit period for unusual fluctuations such as an increase just before and a decrease just after the end of the period.

- Compare gross profit ratio, overall and by product line, to previous years and to budget and consider in the context of industry trends.
- Compare details of units shipped with revenues and production records and consider whether revenues are reasonable compared to levels of production and average sales price.
- Compare the number of weeks of inventory in distribution channels with prior periods for unusual increases that may indicate channel stuffing.
- Compare percentages and trends of sales into the distributor channel with industry and competitors' sales trends, if known.
- Compare revenue deductions, such as discounts and returns and allowances, as a percentage of revenues with budgeted and prior period percentages for reasonableness in light of other revenue information and trends in the business and industry.
- Compare sales credits for returns subsequent to year end with monthly sales credits during the period under audit to determine whether there are unusual increases that may indicate contingent sales or special concessions to customers.
- Analyze the ratio of returns and allowances to sales.
- Compare the aging of accounts receivable in the current and prior periods for buildup of accounts receivable.
- Compare monthly cash receipts for the period under audit to cash receipts subsequent to year end to determine whether receipts subsequent to year end are unusually low compared to the collection history during the months under audit.

SAS No. 56 requires the auditor to evaluate significant unexpected differences that are identified by analytical procedures. Management responses ordinarily should be corroborated with other evidential matter. In situations in which an explanation for the difference cannot be obtained, the auditor should obtain sufficient evidence about the assertion by performing other audit procedures to determine whether the difference is a likely misstatement. This may be particularly appropriate in investigating individually significant revenue transactions.

Cutoff Tests, Vouching, and Other Substantive Tests of Details

The auditor should consider performing tests of details of transactions to determine whether transactions have been properly recorded in accordance with the company's stated accounting policies. Such tests may include cutoff tests and vouching.

Revenue Cutoff Tests

If sales transactions involve the shipment of a product, revenue cutoff tests are used to test the revenue recognition process by determining whether goods have been shipped to the customer and whether the related revenues have been recorded in the same accounting period as shipment occurred. Revenue cutoff tests often are performed in connection with inventory cutoff tests. The scope of cutoff tests may be influenced by the following:

- Large quantities of merchandise awaiting shipment being noted during the year-end inventory observation
- Significant in-transit inventory at year end and/or significant change from the prior year
- An unusual increase in sales in the last few days of the audit period followed by an unusual decrease in the first few days after the audit period
- Numerous shipping locations
- Products with a relatively large per unit value
- Situations in which revenue is recognized before shipment or passage of title

An example of a cutoff test is to examine invoices and shipping documents for several days before and after the end of the accounting period and to trace such documents to the receivables and revenue records for the appropriate period. Compare the date of the invoices to the date of the related shipping documents. The date of billing is not necessarily the time when the revenue should be recognized—it is merely an indication of when the goods were billed. Compare quantities invoiced to quantities shipped, and verify that shipment was made to the customer's site. To properly review the records, use the client's mechanism for establishing control over the recording of shipments and billing of goods, for example, prenumbered shipping reports and prenumbered invoices, for each shipping point.

Vouching

Vouching transactions is an effective and efficient procedure relating to *occurrence* or *accuracy* and *completeness* assertions when controls are weak. The objective is to determine whether recorded transactions actually occurred (are supported by valid source documents or records) and were accurately recorded. An example of vouching transactions is to select a sample of sales invoices from the revenue journal for a period before and a period after the balance sheet date and test for the propriety of revenue recognition with reference to the contractual terms with the customer and relevant legal and accounting regulations. Trace all information (cus-

tomer's name, product description, quantities, prices, terms, and shipping date) to shipping documents and approved sales order or other customer authorization. Trace prices charged to price lists or job quotations. Check extensions and foot invoices or billings for clerical accuracy. Trace invoiced amounts to the subsidiary accounts receivable ledger.

Other Substantive Tests of Details

Other tests of details might include, depending on the specific risks and environment, the following.

- Examine inventory reports or other correspondence from distributors and reconcile this information with the company's records.
- Vouch all large or unusual sales made at quarter end and year end to original source documents.
- Perform a detailed review of the entity's quarter-end or year-end adjusting entries and investigate any that appear unusual as to nature or amount.
- Scan the general ledger, accounts receivable subledger, and sales journal for unusual activity.
- Check the clerical accuracy of the revenue journal or similar record and trace the postings of the totals to the appropriate account in the general ledger.
- Check the reconciliation of revenue journals during the audit period to the general ledger control account, or check the postings to the general ledger control account from sources other than the revenue journal for unusual or unexpected activity.
- Analyze and review deferred revenue accounts at end of the period for propriety of deferral.
- Analyze and review credit memos and other accounts receivable adjustments for the period subsequent to the balance sheet date.
- Scan the general ledger or subsidiary ledgers, as appropriate, for a period subsequent to year end for reversals of sales or large sales returns.
- Review significant year-end contracts for unusual pricing, billing, delivery, return, exchange, or acceptance clauses. Perform post year-end specific review for contract revisions or cancellations and for refunds or credits issued.

CONFIRMATIONS

SAS No. 67, *The Confirmation Process* (AICPA, *Professional Standards*, vol. 1, AU sec. 330), provides guidance to auditors about obtaining evi-

dence from third parties about financial statement assertions made by management. SAS No. 31, *Evidential Matter* (AICPA, *Professional Standards*, vol. 1, AU sec. 326), states that it is generally presumed that evidential matter obtained from independent sources outside an entity provides greater assurance of reliability than that secured solely within the entity.

SAS No. 67 requires auditors who have not requested confirmations in the examination of accounts receivable to document how they overcame the presumption to do so.

SAS No. 67, AU sec. 330.25, also states the following.

> The auditor's understanding of the client's arrangements and transactions with third parties is key to determining the information to be confirmed. The auditor should obtain an understanding of the substance of such arrangements and transactions to determine the appropriate information to include on the confirmation request. The auditor should consider requesting confirmation of the terms of unusual agreements or transactions, such as bill and hold sales, in addition to the amounts. The auditor also should consider whether there may be oral modifications to agreements, such as unusual payment terms or liberal rights of return. When the auditor believes there is a moderate or high degree of risk that there may be significant oral modifications, he or she should inquire about the existence and details of any such modifications to written agreements. One method of doing so is to confirm both the terms of the agreements and whether any oral modifications exist. [Footnote omitted]

As previously discussed, the confirmation of contract terms is suggested in SAS No. 82 in response to the auditor's assessment of the risk of material misstatements arising from fraudulent financial reporting, and in SAS No. 45 to determine the purpose, nature, and extent of transactions with related parties and their effect on the financial statements.

In addition, in some entities, the nature of the business is such that the majority of revenues are comprised of complex transactions evidenced by individual contracts. Entities in which the majority of sales are made pursuant to standard terms also may enter into such contracts for amounts that may be material to recorded revenue. Auditors need to read and understand the terms of contracts because they may significantly affect the accounting treatment for the transaction. In situations in which the auditor requests confirmation of contract terms, he or she should consider confirming with the customer *all* the significant contract terms, including information about payment terms, right-of-return privileges, acceptance criteria, termination arrangements, or bill and hold transactions. The auditor should consider the need to confirm with the customer whether there are significant unfulfilled vendor obligations or the existence of any oral or written agreements, particu-

larly with regard to return or termination arrangements, that may alter the terms of the contract. In some circumstances, auditors might also consider contacting major customers orally in addition to written confirmations to determine whether the responses to confirmation requests received appropriate attention from personnel who are knowledgeable about the contract.

Evaluating Accounting Estimates Relevant to Revenue Recognition

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. Evaluation of estimates is always an area of auditing concern because the measurement of estimates is inherently uncertain and depends on the outcome of future events. SAS No. 57, *Auditing Accounting Estimates* (AICPA, *Professional Standards*, vol. 1, AU sec. 342.10) states the following.

> 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 completion of fieldwork.

Estimates that are significant to management's assertions about revenue include sales returns, the allowance for doubtful accounts, and revenues from contracts accounted for by the percentage-of-completion method of accounting.

Auditors often use historical data to evaluate the reasonableness of estimates such as reserves for sales returns. Historical data may indicate client practices to take back inventory even when no contractual right of return exists. Analysis of the aging of accounts receivables that reflects a "building up" of receivables may indicate contingent sales or concessions to customers regarding the return of goods. Auditors also should consider reviewing sales to major customers, particularly to distributors, to detect excess purchases (channel stuffing) that may be at greater risk of return in the subsequent period. A company's ability to make reasonable estimates of sales returns may be impaired if the company does not have sufficient visibility into what is going on in the sales channel. Reliance on solely historical averages may be insufficient, especially if the environment is somewhat volatile.

Estimating reserves for sales returns is particularly difficult when a new product has been introduced for which there is no historical data. Procedures that the auditor may consider include the following.

- Read trade magazines and analysts' reports to gain an understanding of the acceptance of the product in the marketplace.
- Analyze activity subsequent to year end when actual product returns may have occurred.
- Consider the susceptibility of the product to technological change and how thoroughly tested it was prior to release.
- Analyze historical returns for similar product lines.

The ability to make reasonable estimates of future returns is one of the conditions that must be met for recognition of revenue at the time of sale in accordance with FASB Statement No. 48, *Revenue Recognition When Right of Return Exists.* (See the section entitled "Summary of Selected Accounting Literature on Revenue Recognition.") If reasonable estimates cannot be made, revenue recognition should be deferred.

In addition to analyzing historical data and the accounts receivable aging reports, auditors should consider testing the company's estimate of the collectibility of receivables by procedures such as the following.

- Obtain publicly available information on major customers to determine their ability to honor outstanding obligations to the company.
- Investigate unusual credit limits or nonstandard payment terms granted to customers.
- Test subsequent collections of receivables.

Revenue recognition for contracts accounted for by the percentage-of-completion method is dependent on estimates of contract revenues, contract costs, and the extent of progress toward completion. Meaningful measurement of the extent of progress toward completion is essential because this factor is used in determining the amounts of estimated contract revenue and estimated gross profit that will be recognized as earned in any given period. All of the factors that affect total estimated revenue, including the basic contract price, contract options, change orders, claims, and contract provisions for penalties and incentive payments, must be reevaluated throughout the life of a contract. Although costs incurred to date may be verifiable, estimated costs to complete also are subject to continual refinement as work progresses. Auditors should obtain a sufficient understanding of the contract to evaluate the reasonableness of management's assumptions regarding the estimates. Management also may rely on engineers or architects to make significant estimates. In that case, the auditor should consider

SAS No. 73, *Using the Work of a Specialist* (AICPA, *Professional Standards*, vol. 1, AU sec. 336), and the need to evaluate the relationship of the specialist to the client, including circumstances that might impair the specialist's objectivity. If the auditor believes the specialist's objectivity might be impaired, the auditor should perform additional procedures with respect to some or all of the specialist's findings to determine that the findings are not unreasonable or should engage another specialist for that purpose.

Observation of Inventory

In cases in which inventory is observed at the end of a reporting period, auditors frequently obtain information pertaining to the final shipments of goods made during the period. This information later is compared to the client's sales records to determine whether a proper cutoff of sales occurred. Additional procedures include inspecting the shipping areas at the observation site and making inquiries about whether goods in the shipping area will be included in inventory. If they are not to be included in inventory, the auditor may need to obtain information about the nature of the goods and the quantities, and make additional inquiries of management. Auditors also might inspect the site to determine whether any other inventory has been segregated, and inquire of management whether the company's shipping policy is consistent with prior periods and, if not, why.

If entities have numerous shipping locations, auditors should consider observing inventory counts at all locations on the same day. Alternatively, auditors should consider observing inventory counts at certain locations on an unannounced basis, to detect whether inventories are being shipped from one entity location to another and recorded as sales.

In situations in which potential obsolescence or technology issues may pose special problems, the auditor should consider whether the staff who have been assigned to observe the inventory have the appropriate experience and training and whether the extent of supervision is appropriate for the assessed level of risk.

Management Representations

SAS No. 85, *Management Representations* (AICPA, *Professional Standards*, vol. 1, AU section 333), requires the auditor to obtain written representations from management as a part of an audit of financial statements performed in accordance with GAAS. Such representations are part of the evidential matter the independent auditor obtains, but they are not a substitute for the application of those auditing procedures nec-

essary to afford a reasonable basis for an opinion. Written representations from management complement other auditing procedures.

SAS No. 85 provides guidance on the matters to which specific representations should relate, including the financial statements; completeness of information; recognition, measurement and disclosure; and subsequent events. Examples of such representations that are relevant to revenue recognition include representations that—

- There has been no fraud that could have a material effect on the financial statements.
- Related-party transactions, including sales and amounts receivable from related parties, have been properly recorded and disclosed.
- All financial records and related data have been made available.
- Significant estimates and material concentrations that are required to be disclosed in accordance with SOP 94-6 have been disclosed.

The representation letter ordinarily should be tailored to include additional appropriate representations from management relating to matters specific to the entity's business or industry. The auditor may consider it useful to obtain written representations concerning specific revenue recognition issues, such as the terms and conditions of unusual or complex sales agreements. Such representations may include confirmation that there are no contingencies that affect the obligation of customers to pay for merchandise purchased, and may also include confirmation regarding the existence of side agreements.

Auditors should consider whether there is a need to obtain written representations from individuals below the executive level, such as sales personnel.

Adequacy of Disclosure

SAS No. 32, *Adequacy of Disclosure in Financial Statements* (AICPA, *Professional Standards*, vol. 1, AU sec. 431), requires the auditor to express a qualified or an adverse opinion if management omits from the financial statements, including the accompanying notes, information that is required by GAAP.

The auditor should review the financial statements to determine whether disclosures are adequate with regard to revenue recognition policies, information about major customers or significant concentrations of credit risk, related-party transactions, and the effect of significant revisions to estimates in percentage-of-completion contracts.

EVALUATION OF AUDIT EVIDENCE

SAS No. 31, *Evidential Matter* (AICPA, *Professional Standards*, vol. 1, AU sec. 326.25), states the following.

> In evaluating evidential matter, the auditor considers whether specific audit objectives have been achieved. The independent auditor should be thorough in his or her search for evidential matter and unbiased in its evaluation. In designing audit procedures to obtain competent evidential matter, he or she should recognize the possibility that the financial statements may not be fairly presented in conformity with generally accepted accounting principles or a comprehensive basis of accounting other than generally accepted accounting principles. In developing his or her opinion, the auditor should consider relevant evidential matter regardless of whether it appears to corroborate or to contradict the assertions in the financial statements. To the extent the auditor remains in substantial doubt about any assertion of material significance, he or she must refrain from forming an opinion until he or she has obtained sufficient competent evidential matter to remove such substantial doubt, or the auditor must express a qualified opinion or a disclaimer of opinion. [Footnotes omitted]

RESOURCES

FINANCIAL ACCOUNTING STANDARDS BOARD

Statements of Financial Accounting Standards[5]

FASB Statement No. 5, *Accounting for Contingencies*, (FASB, *Current Text*, vol. 1, sec. C59)

FASB Statement No. 45, *Accounting for Franchise Fee Revenue* (FASB, *Current Text*, vol. 2, sec. Fr3)

FASB Statement No. 48, *Revenue Recognition When Right of Return Exists* (FASB, *Current Text*, vol. 1, sec. R75)

FASB Statement No. 50, *Financial Reporting in the Record and Music Industry* (FASB, *Current Text*, vol. 2, sec. Re4)

FASB Statement No. 51, *Financial Reporting by Cable Television Companies* (FASB, *Current Text*, vol. 2, sec. Ca4)

FASB Statement No. 53, *Financial Reporting by Producers and Distributors of Motion Picture Films* (FASB, *Current Text*, vol. 2, sec. Mo6)

FASB Statement No. 57, *Related Party Disclosures* (FASB, *Current Text*, vol. 1, sec. R36)

FASB Statement No. 66, *Accounting for Sales of Real Estate* (FASB, *Current Text*, vol. 1, sec. R10)

Exposure Drafts Outstanding

Proposed Statement of Financial Accounting Standards, *Rescission of FASB Statement No. 53*, issued October 16, 1998, comment deadline January 18, 1999

Technical Bulletins

FASB Technical Bulletin No. 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts* (FASB, *Current Text*, vol. 1, sec. R75)

Statements of Financial Accounting Concepts

FASB Concepts Statement No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises*, (FASB, *Original Pronouncements*, vol. 2)

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[5] This section does not include guidance related to financial instruments, such as FASB Statement No. 125, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, and related EITF Issues.

FASB Concepts Statement No. 6, *Elements of Financial Statements* (FASB, *Original Pronouncements*, vol. 2)

Emerging Issues Task Force Abstracts

EITF Issue No. 84-15, *Grantor Trusts Consolidation*

EITF Issue No. 84-17, *Profit Recognition on Sales of Real Estate with Graduated Payment Mortgages or Insured Mortgages*

EITF Issue No. 84-37, *Sale-Leaseback Transaction with Repurchase Option*

EITF Issue No. 85-24, *Distribution Fees by Distributors of Mutual Funds That Do Not Have a Front-End Sales Charge*

EITF Issue No. 85-27, *Recognition of Receipts from Made-Up Rental Shortfalls*

EITF Issue No. 86-6, *Antispeculation Clauses in Real Estate Sales Contracts*

EITF Issue No. 86-7, *Recognition by Homebuilders of Profit from Sales of Land and Related Construction Contracts*

EITF Issue No. 86-17, *Deferred Profit on Sale-Leaseback Transaction with Lessee Guarantee of Residual Value*

EITF Issue No. 86-29, *Nonmonetary Transactions: Magnitude of Boot and the Exceptions to the Use of Fair Value*

EITF Issue No. 87-9, *Profit Recognition on Sales of Real Estate with Insured Mortgages or Surety Bonds*

EITF Issue No. 87-10, *Revenue Recognition by Television "Barter" Syndicators*

EITF Issue No. 88-12, *Transfer of Ownership Interest as Part of Down Payment Under FASB Statement No. 66*

EITF Issue No. 88-14, *Settlement of Fees with Extra Units to a General Partner in a Master Limited Partnership*

EITF Issue No. 88-18, *Sales of Future Revenues*

EITF Issue No. 88-24, *Effect of Various Forms of Financing under FASB Statement No. 66*

EITF Issue No. 89-7, *Exchange of Assets or Interest in a Subsidiary for a Noncontrolling Equity Interest in a New Entity*

EITF Issue No. 91-6, *Revenue Recognition of Long-Term Power Sales Contracts*

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Banks and Savings Institutions
Brokers and Dealers in Securities
Casinos
Construction Contractors
Entities with Oil and Gas Producing Activities
Finance Companies
Health Care Organizations
Investment Companies
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