1 REVENUE RECOGNITION GENERAL PRINCIPLES AND SYSTEMS

OVERVIEW OF REVENUE RECOGNITION

The principles guiding recognition of revenues for financial reporting purposes are central to generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS) and in most instances are unambiguous and straightforward. In fact, the underlying principles have not changed in decades. However, as business transactions have become more complicated over time, GAAP and IFRS have expanded to include detailed rules for certain types of revenue recognition issues. Revenue recognition for GAAP is now aggregated under Topic 605 of the Accounting Standards Codification, while the same topic is somewhat more dispersed among IFRS source documents. This book summarizes these issues by topic and industry, covering such industries as motion pictures, software development, franchising, and real estate, while also addressing such cross-industry topics as situations when there is a right of return, or if collection is uncertain.

Each chapter begins with an overview of the topic, definitions of key terms, and a discussion of the key revenue recognition issues. If GAAP or IFRS mandates or recommends disclosure of revenue recognition information alongside the financial statements, then these disclosures are also noted, along with examples. Finally, a number of policies, procedures, and controls are covered that can support the systems needed to accumulate and report revenue transactions. These supporting systems are quite necessary, in light of the fraudulent reporting problems that are discussed later in this chapter.

REVENUE RECOGNITION GENERAL GUIDELINES

Revenue, whether from the sale of product or provision of services, is to be recognized only when it has been earned. According to the Statement of Financial Accounting Concepts No. 5 (CON 5), Recognition and Measurement in Financial Statements of Business Enterprises,

...(a)n entity's revenue-earning activities involve delivering or producing goods, rendering services, or other activities that constitute its ongoing major or cen-

tral 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.

In other words, in order to be recognized, revenue must be realized or realizable, and it must have been earned.

CON 5 notes that "the two conditions (being realized or realizable, and being earned) are usually met by the time product or merchandise is delivered or services are rendered to customers, and revenues from manufacturing and selling activities and gains and losses from sales of other assets are commonly recognized at the time of sale (usually meaning delivery)." Moreover, "if services are rendered or rights to use assets extend continuously over time (for example, interest or rent), reliable measures based on contractual prices established in advance are commonly available, and revenues may be recognized as earned as time passes." In other words, for most traditional and familiar types of transactions, the point at which it is appropriate to recognize revenue will be quite clear.

The SEC's Revenue Recognition Criteria

The Securities and Exchange Commission (SEC), reflecting on the conceptual foundation for revenue recognition, observed in Staff Accounting Bulletin 104 (SAB 104), that

Revenue generally is realized or realizable and earned when **all** of the following criteria are met:

- 1. There is persuasive evidence that an arrangement exists,
- 2. Delivery has occurred or services have been rendered,
- 3. The seller's price to the buyer is fixed or determinable, and
- 4. Collectibility is reasonably assured.

Note that while SEC rules and "unofficial" guidance are not necessarily to be deemed GAAP for nonpublic companies, to the extent that these provide insights into GAAP standards, they should always be viewed as relevant guidance and followed, absent other, contradictory rules established under GAAP. In the absence of any other source found in the GAAP rules, SEC pronouncements may represent the best thinking on the subject and are considered authoritative for all reporting entities.

With regard to the four criteria set forth above, consideration should be directed at the following discussion, which is drawn partially from SAB 104.

Persuasive Evidence of an Arrangement

First, regarding persuasive evidence of an arrangement, attention must be paid to the customary manner in which the reporting entity engages in revenue-producing transactions with its customers or clients. Since these transactions are negotiated between the buyer and seller and can have unique or unusual terms, there are (and can be) no absolute standards. Thus, for an enterprise that traditionally obtains appropriate documentation (purchase orders, etc.) from its customers before concluding sales to them, advance deliveries to customers, even if later ratified by receipt of the proper paperwork, would not be deemed a valid basis for revenue recognition at the time of delivery.

Example

The Minnetonka Motor Company has a new plastic engine available to ship to customers before the end of the current fiscal year. Wilson Trucks places an order for the new engine, and Minnetonka delivers the engine prior to the end of the year. Minnetonka's customary business practice is to require a signed sales agreement that must be signed by an authorized customer representative. Minnetonka issues the sales order, but the only person at Wilson authorized to sign the agreement is its president, who is on vacation. Wilson's purchasing manager has orally agreed to the contract and stated that it is highly likely that the president will sign the agreement upon his return from vacation.

Based on this scenario, the SEC does not believe that Minnetonka can recognize revenue in the current fiscal year, on the grounds that this arrangement has departed from Minnetonka's current business practice. In particular, the sales agreement is subject to a subsequent approval, which has not yet been obtained.

When evaluating purported revenue transactions, the substance of the transactions must always be considered, and not merely their form. It has become increasingly commonplace to "paper over" transactions in ways that can create the basis for inappropriate revenue recognition. For example, transactions that are actually consignment arrangements might be described as "sales" or as "conditional sales," but revenue recognition would not be appropriate until the consigned goods are later sold to a third-party purchaser.

Example

The Brass Fittings Company, maker of finely machined plumbing fittings, enters into an arrangement with Monaco Plumbing to deliver its products to Monaco on a consignment basis. The agreement specifically states that Monaco is the consignee, and that title to the products does not pass from Brass to Monaco until Monaco uses the fittings in its operations. Brass delivers product to Monaco and wants to recognize revenue at the time of shipment.

Based on this scenario, the SEC would not allow revenue recognition by Brass Fittings, on the grounds that products delivered to a consignee under a consignment arrangement are not sales and do not qualify for revenue recognition until a sale occurs. Revenue recognition is not appropriate, because Brass Fittings retains the risks and rewards of ownership, and title has not passed to Monaco.

Careful analysis of the rights and obligations of the parties and the risks borne by each at various stages of the transactions should reveal when and whether an actual sale has occurred and whether revenue recognition is warranted. The SEC believes that one or more of the following characteristics of a sale arrangement will preclude revenue recognition, even if title to the product has passed to the buyer:

- 1. The product is intended to be for demonstration purposes.
- 2. The seller is obligated to repurchase the product at specific prices, where the repayment prices are adjustable to cover the costs incurred by the buyer to purchase and hold the product.
- 3. The buyer can return the product and
 - a. The buyer does not pay at the time of sale and is not obligated to do so on any specific dates; or
 - b. The buyer's obligation to pay is excused until the buyer resells or uses the product; or
 - c. The buyer will not have to pay if the product is damaged or destroyed; or
 - d. The buyer has no economic substance except for that provided by the seller; or
 - e. The seller has major obligations to assist the buyer in reselling the product.

Example

Scenario 1. The Guttering Candle Company, maker of beeswax candles, runs a special promotion during the slow first quarter of the year, where it refunds a portion of the original purchase price that is calculated based on the holding period of each buyer until such time as the buyer resells the candles to its customers.

Scenario 2. Guttering Candle pays interest costs on behalf of buyers under a third-party financing arrangement, until such time as they sell candles acquired from Guttering Candle.

Scenario 3. Guttering Candle provides below-market financing to buyers for the period beyond its customary 30-day payment terms and until the candles are resold.

Based on these scenarios, the SEC would not allow Guttering Candle to recognize revenue at the point of initial sale, because it is adjusting the purchase price to cover the holding costs of buyers.

In some countries, sellers commonly retain a form of title to goods delivered to customers until paid, so they can recover the goods in the event of a buyer default. Sellers are not entitled to direct the disposition of the goods and cannot rescind the transaction. In such a case, the SEC allows the seller to recognize revenue at the time of delivery. Only when the seller retains other rights normally held by the buyer of the goods will the SEC consider the transaction to be consignment, and not allow revenue recognition. The buyer must assume the risks of ownership in all cases if revenue is to be recognized.

Example

The Tidal Energy Company produces electrical turbines that are triggered by wave action. It enters into a formal agreement to sell ten of its most advanced turbines to the government of Vanuatu, located on an atoll in the Pacific Ocean. Tidal's sales manager also enters into a side agreement with the Energy Minister of Vanuatu, allowing for the return of all ten turbines within one year of installation if they do not provide the rated power levels.

Based on this scenario, the SEC would not allow Tidal to recognize revenue at the point of initial sale, on the grounds that the side agreement indicates that Tidal must continue to perform for one year before the revenue can be finalized. Also, if the side agreement was not properly documented and approved by Tidal's management, this is also a control breach that Tidal should recognize under the Sarbanes-Oxley Act.

Delivery Has Occurred or Services Rendered

With regard to whether delivery has occurred or services have been rendered, ownership and risk taking must have been transferred to the buyer if revenue is to be recognized by the seller. Thus, if the seller is holding goods for delivery to the buyer because the buyer's receiving dock workers are on strike and no deliveries are being accepted, revenue generally cannot be recognized in the reporting period, even if these delayed deliveries are made subsequent to period-end. (There are limited exceptions to this general principle, typically involving a written request from the buyer for delayed delivery under a "bill-and-hold" arrangement, having a valid business purpose.)

The SEC frowns upon bill-and-hold transactions. It will generally not allow revenue recognition in either of the following circumstances:

- When a company completes manufacturing of a product and segregates the inventory within its facility; or
- When a company ships products to a third-party storage facility while retaining title to the product and payment by the buyer will not occur until it is delivered to the buyer.

The SEC bases its opinion on the underlying concepts that revenue recognition does not occur until the customer takes title to the goods and assumes the risks and rewards of ownership. Consequently, the SEC uses all of the following criteria when determining whether revenue should be recognized:

- 1. Ownership risk must pass to the buyer;
- 2. The customer makes a (preferably) written commitment to buy the goods;
- 3. The buyer must request that the sale be on the bill-and-hold basis, and have a substantial business purpose for doing so;
- 4. There is a reasonable delivery schedule for the goods;
- 5. The seller has no remaining performance obligations;
- 6. The goods have been segregated, and cannot be used to fill other orders received by the seller; and
- 7. The product must be complete.

The SEC further points out that these criteria are not a checklist that will guarantee revenue recognition if a company can structure a transaction to meet all of the requirements; they are general criteria used to examine the intent of a transaction. In addition, the following factors should be considered in making the revenue recognition determination:

- 1. Whether the seller has modified its standard billing and credit terms for the buyer;
- 2. The seller's past pattern of using bill-and-hold transactions;
- 3. Whether the buyer has assumed the risk of loss if the market value of the goods declines;
- 4. Whether the seller's custodial risks of the goods purportedly sold are insurable and insured; and
- 5. That the business reasons for the bill-and-hold arrangement have not imposed a contingency on the buyer's commitment to accept the goods.

The SEC further states that delivery has generally not occurred unless the product has been delivered to either the customer or another site specified by the customer. If the customer specifies delivery to a staging site but a substantial portion of the sales price is not payable until delivery is ultimately made to the customer, then revenue recognition must be delayed until final delivery to the customer has been completed.

Delivery, as used here, implies more than simply the physical relocation of the goods to the buyer's place of business. Rather, it means that the goods have actually been accepted by the customer, which, depending on the terms of the relevant contract, could be conditioned on whether inspection, testing, and/or installation have been completed, and the buyer has committed to pay for the items purchased. For revenue recognition to be justified, substantial performance of the terms of delivery must have occurred, and if any terms remain uncompleted, there should be a basis grounded on historical experience to assume that these matters will be satisfactorily attended to.

The SEC holds that revenue should not be recognized until such time as any uncertainty about customer acceptance of goods or services has been eliminated. This requires an examination of customer acceptance provisions in the purchase agreement. For example, the agreement may allow the customer to test the product or require additional services subsequent to delivery, such as product installation. If these provisions exist, the SEC assumes that the customer specifically bargained for their inclusion in the agreement, which makes them substantive parts of the agreement. Consequently, revenue cannot be recognized until either the customer has accepted the goods or services, or the acceptance provisions have lapsed.

The SEC states that formal customer sign-off on a contractual customer acceptance provision is not always necessary. Instead, the seller can demonstrate that the criteria specified in the acceptance provisions are satisfied.

The SEC considers customer acceptance provisions to take one of four general forms, which are

- 1. Acceptance for trial or evaluation purposes. The customer agrees to accept the product strictly for evaluation purposes, so title remains with the seller. The customer may then actively affirm acceptance or do so simply through the passage of time; in either case, this is essentially a consignment arrangement where the seller should not recognize revenue until the customer confirms that it will purchase the product.
- 2. Acceptance granting a right to return or exchange on the basis of subjective issues. The customer has the right to return the product if dissatisfied with it. In this case, a company can recognize revenue at the initial point of sale, but only if it can reasonably estimate the amount of future returns and accrue for them. If the seller cannot make this estimate, then it must wait until the right of return has expired before recognizing revenue.
- 3. Acceptance based on seller-specified objective criteria. The customer has a right of return or replacement if the delivered product is defective or fails to meet its published specifications. If the seller has already demonstrated that the product meets its specifications and can reasonably estimate the amount of defective products, then

- it can create a warranty reserve and recognize revenue at the point of sale. If the seller cannot prove that the product meets its published specifications, then it should defer revenue recognition until the specifications have been achieved.
- 4. Acceptance based on customer-specified objective criteria. The customer has created a specific set of acceptance criteria that the seller must meet before the customer will accept the delivery. This is best achieved with a formal sign-off document. Alternatively, the seller can demonstrate that the delivered product meets the customer's criteria (such as through preshipment testing). However, it may not be possible to conduct such testing prior to delivery, because performance may vary based on how the product works in combination with the customer's other systems. In this case, revenue recognition should be deferred until the product is actually installed and meets the stated criteria. Also, the seller must evaluate its ability to enforce a payment claim in the absence of a formal sign-off. If payment enforcement would be difficult, then revenue recognition should be deferred until formal customer sign-off.

This is perhaps the most subjective of the four forms of customer acceptance, so the SEC states that it will not object to a determination that is well reasoned on the basis of the guidance just described.

Example

The Dense Air Corporation manufacturers air compressors in a variety of standard models. The contract for sale of every standard model provides for customer acceptance of the compressors after receipt and testing by the customer. The contract states that customers are entitled to a full refund if the equipment does not perform as specified. Customers can indicate their acceptance by signing a form, or by the passage of 45 days, as noted in the acceptance provisions. Dense Air tests all of its compressors prior to shipment to ensure that they meet specifications.

Dense Air receives an order for its standard Nitrox compressor model from Maldives Diving. Dense Air has produced that model for five years and has no reason to believe that it will behave differently at Maldives than it does in the Dense Air facility. Based on the circumstances, Dense Air can reasonably and reliably estimate the amount of its warranty obligation, and so can recognize revenue upon delivery of the equipment, along with an appropriate liability for warranty obligations.

Example

The Dense Air Corporation receives a special order for its Nitrox compressor from Compact Boat Company, which needs to fit the compressor into

an unusually small space on one of its boats. In addition to the usual customer acceptance provisions, Compact Boat can reject the compressor if it does not fit into the specified dimensions. Dense Air creates an installation space having the exact dimensions of those specified by Compact Boat, and verifies that the compressor both fits into this space and operates within the specifications.

Though the contract with Compact Boat contains a clause that includes customer-specific criteria, Dense Air demonstrates that the compressor meets the customer's objective criteria before it has shipped. Consequently, Dense Air can recognize revenue upon delivery of the equipment, along with an appropriate liability for warranty obligations.

Example

The Dense Air Corporation receives an order for its Nitrox compressor from Graphite Solutions, which plans to incorporate the compressor into a new filling station for its spun-graphite air tanks, which store compressed gases at extremely high pressure. Graphite may reject the compressor if it fails to meet the standard specifications, or cannot be integrated into the new filling station. Dense Air has no experience with this type of filling station, and cannot test it in advance to ensure compliance with Graphite's needs. However, the compressor meets all of Dense Air's standard performance criteria.

Because Dense Air cannot demonstrate that the compressor meets Graphite's criteria prior to shipment, it should wait until the compressor is successfully integrated into the filling station before recognizing revenue.

In some instances there are multiple "deliverables"; in such cases, revenue is not recognized for any given element if later deliverables are essential for the functionality of the already delivered element. In other situations, such as in various licensing arrangements, physical "delivery" may occur well before product usage by the buyer can take place (e.g., software for the future year's tax preparation delivered before the current year-end), and revenue is not to be recognized prior to the initial date of expected use by the buyer.

In the case of many service transactions, large up-front fees are often charged, nominally in recognition of the selling of a membership, the signing of a contract, or for enrolling the customer in a program. (An example is initiation fees to join a health club where the terms of membership also obligate the member to pay ongoing fees.) Unless the services provided to the customer at inception are substantial, the presumption is that the revenue received has not been earned, but rather must be deferred and recognized, usually ratably, over the period that substantive services are provided. Thus, initiation fees are amortized over the membership period.

According to the SEC, there are numerous situations where a customer must pay an up-front fee as part of a purchase transaction. For example, the fee may involve the conveyance of a license, or the delivery of a product or service. In many cases, the customer would not have paid the fee if the seller were not involved on a continuing basis with the provision of additional services. For example

- Access fee. A Web site that hosts a variety of databases charges a fee to its customers for unrestricted access to its data, which requires minimal additional cost by the Web site once the user has been given access to the system.
- Activation fee. A phone company mandates an activation fee when it sets up phone services for a new customer, as well as monthly usage fees.
- Hosting fee. A Web hosting company charges a fee for hosting a customer's Web site, where most of the cost is incurred during the initial installation.
- *Initiation fee*. A health club sells a membership to a customer, which includes an initiation fee and a continuing monthly fee.
- Listing fee. A Web site charges advertisers a fee to list their products on its Web site for a designated period of time, where there is a minimal cost associated with the advertisement during the period when it is posted.
- Technology access fee. The holder of intellectual property and research services requires its customers to pay a fee for access to its proprietary technology, as well as a periodic fee for its research services.

In all of the preceding examples, the SEC holds that revenue recognition of up-front fees should be deferred, unless the fees are in exchange for products or services that represent the completion of a separate earnings process. In essence, customers are really purchasing the ongoing rights, products, or services that the seller is providing through its continuing involvement under the sales arrangement. Thus, the SEC does not consider such activities as selling a membership or providing initial set-up services to be discrete earnings events.

There may be instance where the seller is incurring significant up-front costs, and so feels justified in recognizing revenue to the extent of those costs. However, because there is no separate deliverable associated with these costs (just an initial set-up), the SEC will usually object to such treatment. In most situations, the SEC believes that the up-front fee is coupled with the continuing performance obligation related to the services or products subsequently delivered to the customer; based on this judg-

ment, the SEC believes that up-front fees should be recognized as revenue as the seller provides products or services over the period of performance. A reasonable form of such recognition is to recognize the revenue systematically over the period of performance.

In cases where the seller is providing a service and requires an up-front fee, the SEC prefers that the fee be accounted for as revenue on a straight-line basis; this recognition shall be either over the term of the arrangement or the expected period during which services are to be performed, whichever is longer. The only situation where revenue is not recognized on a straight-line basis is when revenue is earned or obligations are fulfilled in a different pattern.

Even in cases where the seller's obligations to the buyer are inconsequential or perfunctory, the SEC believes that the substance of these transactions indicates that the buyer is paying for a service that is delivered over a period of time, which therefore calls for revenue recognition over the period of performance.

Price Is Fixed or Determinable

The seller's price to the buyer is fixed or determinable when a customer does not have the unilateral right to terminate or cancel the contract and receive a cash refund. Depending on customary practice, extended return privileges might imply that this condition has not been met in given circumstances. Prices that are conditional on the occurrence of future events are not fixed or determinable from the perspective of revenue recognition.

In theory, until the refund rights have expired, or the specified future events have occurred, revenue should not be recognized. As a practical matter, however, assuming that the amount of refunds can be reliably estimated (based on past experience, industry data, etc.), revenues, net of expected refunds, can be recognized on a pro rata basis. Absent this ability to reliably estimate, however, revenue recognition is deferred.

A contract with a customer may contain a provision where cancellation privileges expire ratably over a stated contractual period. If so, the SEC believes that the sales price is also determinable ratably over the stated term. This view does not apply to short-term rights of return, such as a money-back guarantee within the first 30 days of ownership by the customer.

If a company sells a membership fee that can be cancelled by customers for a full refund at any time during the membership period, then the SEC holds that revenue recognition cannot occur until the end of the contractual period. The reason for this position is that there is uncertainty as to

whether the fee is fixed or determinable at any point before the end of the period, since the customer has the right to unilaterally terminate the contract and receive a refund. In the meantime, cash received for such fees should be recorded in a liability account.

The SEC has indicated that it will *not* object to the recognition of refundable membership fees, net of estimated refunds, over the membership term, but only if *all* of the following criteria have been met:

- Large pool of data. The estimates of terminations and refunded revenues are made from a large pool of homogeneous items.
- Reliable refund estimates can be made. This is not the case if there are recurring and significant differences between actual and estimated termination experience (even if the impact of the variance on the amount of estimated refunds is not material to the financial statements), or if there are recurring variances that are material to either revenue or net income in quarterly or annual financial statements.

The SEC believes that an estimate, for purposes of meeting this criterion, is not reliable unless there is only a remote possibility that material adjustments to previously recognized revenue would be required. The SEC further presumes that reliable estimates cannot be made if termination and refund privileges exceed one year.

- Sufficient historical basis. A company should have a sufficient basis of historical information upon which to base its refund estimates, and it expects that this information is predictive of future events. Such estimates should take account of the following:
 - Historical experience by class of customer and service type
 - Trends in the historical information and the reasons for those trends
 - The impact of competing products or services
 - Changes in the ease with which customers can obtain refunds
- *Fixed membership fee*. The amount of the membership fee was fixed at the beginning of the agreement.

Only if *all* of these criteria are met will the SEC allow revenue recognition for the membership fee prior to the termination of customer refund rights. If revenue is recognized under these criteria, then a company should record the initial fees received from customers in two accounts:

• The amount of the fee representing estimated refunds is credited to a monetary liability account, such as "Fees refundable to customers."

- The amount of the fee representing unearned revenue is credited to a nonmonetary liability account, such as "Unearned revenues."
- When this accounting treatment is used, the company should disclose the following items with its financial statements:
 - The amount of unearned revenue
 - Refund obligations at the beginning of the period
 - Total cash received from customers
 - Revenue recognized in earnings
 - Total refunds paid
 - Other adjustments
 - Ending balances of unearned revenue and refund obligations

If a company recognizes refundable fee revenue ratably, then it should use a retrospective approach when adjusting for changes in estimated refunds. Under this method, unearned revenue and refund obligations are remeasured and adjusted at each balance sheet date, with the offsetting debit or credit being recorded as earned revenue.

A company does not have to recognize revenue ratably as allowed under the criteria in this section. The SEC will also allow the complete deferral of all related revenue until the refund period lapses, even if a company meets all of the criteria noted here. However, the company should disclose its recognition policy and apply it consistently for similar transactions.

Collectibility Is Reasonably Assured

The final factor, reasonable assurance of collectibility, implies that the accrual for bad debts (uncollectible accounts receivable) can be estimated with reasonable accuracy, both to accomplish proper periodic matching of revenue and expenses and to enable the presentation of receivables at net realizable value, as required under GAAP. An inability to accomplish this objective necessitates deferral of revenue recognition—generally until collection occurs, or at least until it becomes feasible to estimate the uncollectible portion with sufficient accuracy.

An extreme situation, calling for not merely accrual of losses from estimated uncollectible receivables, is to defer revenue recognition entirely until collectibility is assured (or actually achieved). The most conservative accounting alternative, first set forth in Accounting Research Bulletin No. 43 (ARB 43) and then again cited in CON 5, is to record revenue only as collected. It states "if collectibility of assets received for product, services, or other assets is doubtful, revenues and gains *may* be recognized on the basis of cash received" (emphasis added). The permissive language, which (it must be assumed) was deliberately selected in preference to a mandatory exhortation (e.g., "must"), suggests that even in such a situation, this

hyperconservative departure from accrual accounting is not truly prescriptive but is a possible solution to a fact-specific set of circumstances.

The SEC mandates that, if a portion of a contract price is withheld or refundable until an outstanding service is delivered, then the revenue associated with that portion of the contract should not be recognized until the service has been completed.

Inconsequential Performance Obligations

The SEC holds that revenue may be recognized in its entirety if the seller's remaining obligation is inconsequential or perfunctory. This means that the seller should have substantially completed the terms specified in the sales arrangement in order for delivery or performance to have occurred. Any remaining incomplete actions can only be considered inconsequential if the failure to complete them would not result in the customer receiving a refund or rejecting the products or services. Further, the seller should have a history of completing the remaining tasks in a timely manner, and of being able to estimate all remaining costs associated with those activities. If revenue is recognized prior to the completion of any inconsequential items, then the estimated cost of those inconsequential items should be accrued when the revenue is recognized.

Given the ability to recognize revenue prior to the completion of inconsequential or perfunctory items, it is important to define these terms. In brief, a performance obligation is not inconsequential or perfunctory if it is essential to the functionality of the delivered products or services. Further, failure to complete them should result in the buyer receiving either a full or partial refund, or rejecting the delivered products or services. Also, it is possible that revenue recognition cannot occur if the company has a history of allowing refund or rejection rights in its prior contracts for these items, even if those terms are not present in the contract under consideration.

The SEC also considers the following factors as indicators that a remaining performance is substantive, rather than inconsequential or perfunctory:

- *Consistency*. The seller does not have a demonstrated history of completing the remaining tasks in a timely manner, nor of estimating their associated costs.
- *Cost*. The cost to extinguish the obligation is not insignificant in proportion to such items as the total revenue, gross profit, and operating income associated with the contract.
- *Duration*. The period before the remaining obligation will be extinguished is lengthy.

- *Payment timing*. Buyers issue payment of a portion of the sales price at approximately the same time that remaining performance is completed.
- *Requirements*. The skills or equipment needed to extinguish the obligation are specialized or not readily available in the marketplace.
- *Variability*. The cost or time needed to extinguish the obligation for similar contracts has historically been quite variable.

The SEC also mandates that a seller's determination of whether remaining obligations are inconsequential or perfunctory should be consistently applied. Thus, it is advisable to use a standard procedure and checklist for making this determination.

Conjoined Equipment and Installation

The SEC holds that, if the sale of equipment and related installation activities cannot be separated for revenue recognition purposes, then revenue recognition cannot take place until installation is complete. This situation arises when the equipment does not have value to the customer prior to installation, there is no evidence of fair value for the installation, or the buyer has a right of return when the installation is not considered probable.

Indicators that installation is essential to the functionality of an equipment sale are that installation services are not available from other suppliers, and that the installation involves significant changes to the equipment or building complex interfaces or connections.

However, installation is not essential to equipment functionality if the equipment is a standard product, installation does not significantly alter the equipment's capabilities, and other companies can also perform the installation.

Example

A/R Software Company owns CollectNow, which is a software package designed to assist the receivable collection staffs of its clients in their efforts to track outstanding receivables. It is installed on top of each client's accounting software, so that it can extract information from the receivables and customer master files. These interfaces are complex, and are usually individually created for each client. If a client owns an accounting package for which A/R has previously created interfaces, then the installation is much easier and more predictable.

A/R sells CollectNow to Pueblo Pottery, a figurine manufacturer. Pueblo uses the PottAlot accounting package, which is specific to the pottery industry, and for which it has not developed any interfaces. In this situation, CollectNow is useless to Pueblo Pottery until it is installed, and A/R must create

several complex interfaces in order to make it function properly. In this situation the proper accounting treatment is to not recognize any revenue until the installation is complete and the CollectNow software is functional with Pueblo's software.

License Fee Revenue

In a situation where a company delivers and receives payment for intellectual property, the SEC holds that it cannot begin to recognize any revenue associated with the transaction until the beginning of the licensing period. At that point, the seller should recognize revenue in a manner consistent with the nature of the transaction and the earnings process.

Layaway Sales

In a situation where a retailer offers layaway privileges to its customers, the retailer retains the merchandise and collects a cash deposit from the customer; the customer does not receive the merchandise until the full price is paid, and the retailer can retain the deposit if the customer fails to pay the remainder of the amount due. In this scenario, the SEC states that the retailer should only recognize revenue under the layaway program when it has delivered the merchandise to the customer. Prior to that time, deposits should be recorded as a liability. The SEC would object to recognizing deposits as revenue, on the grounds that the retailer still owns the merchandise, has only received a deposit, and has no right to the remainder of the purchase price.

Defense of Intellectual Property

If a company has a patent on its intellectual property, and it licenses the property to customers, the company may represent to the customers that it will maintain and defend the patent. The SEC holds that it is not allowable to characterize this obligation as a deliverable to the customer, which might otherwise impact the timing of revenue recognition.

Estimates and Changes in Estimates

GAAP accounting requires that a company create a reserve for product returns in sales transactions where a right of return exists. Under GAAP, the following factors may impair a company's ability to make a reasonable estimate of product returns:

- *Demand changes*. Susceptibility of the product to such external factors as technological obsolescence or changes in demand.
- *No history*. Absence of historical experience with similar types of sales of similar products. This is a particularly common issue for

start-up companies and companies selling new or significantly modified products.

- *No homogeneity*. Absence of a large volume of relatively homogenous transactions.
- *Return duration*. Long periods in which a product may be returned.

In addition, the SEC has developed a list of factors that may preclude a company from developing a reliable estimate of product returns, which are

- Channel stuffing. Excessive levels of inventory in a distribution channel.
- *Competing products*. Newly introduced competing products having either superior technology or an increased level of expected market acceptance.
- *Distributor dominance*. A large proportion of the company's business, sales, and marketing with a particular distributor.
- *New Product*. A new product for which there is no historical return information.
- *Obsolescence*. New product introductions that will increase the amount of returns of current products.
- Sales visibility. Lack of visibility into the inventory levels in a distribution channel or the amount of sales to end-users.
- Other. Other factors affecting market demand and trends in that demand for the company's products.

If a sales transaction cannot meet all of the above conditions, a company cannot recognize any of the revenue associated with the transaction until either the conditions have been met or the return privilege has substantially expired, whichever occurs first. The SEC does not feel that creating a reserve based on the maximum possible amount of returns is an acceptable alternative method.

Contingent Rental Income

A lessor may enter into an agreement with a lessee under which the lessor is entitled to payments from the lessee that are contingent on subsequent business events. According the SEC, the lessor may not accrue the contingent revenue even if it will probably occur. Instead, such revenue can only be recognized when the underlying event actually occurs.

Example

Hempstead Properties leases retail office space to Stork, a purveyor of baby clothes. Under the terms of the one-year lease, Stork pays Hempstead \$25,000 per month, plus one percent of its revenue that exceeds \$15 million during the one-year term of the lease. Stork has consistently generated \$18

million revenue from this store in the past, and will probably generate similar sales during the lease period, which would entitle Hempstead to an additional payment of \$30,000. Stork typically generates the same amount of revenue in each month of the year.

Stork should reach the \$15 million threshold sales level at the end of the tenth month of the lease, so Hempstead can recognize an additional \$15,000 of revenue in both the eleventh and twelfth months of the lease.

Claims Processing and Billing Services

A common reimbursement clause in a contract to provide claims processing and billing services is that the service provider is entitled to some portion of collected amounts. The SEC holds that the service provider cannot accrue revenue for such services, but must instead wait until collection occurs before recognizing revenue.

Example

Zork Claims Processing provides claims processing services for health providers, whereby it prepares, submits, and collects on claims to third-party insurance companies. In exchange for these services, Zork receives 3% of the amount collected. Zork has considerable historical evidence that third-party insurance companies pay 82% of the billings it submits to them.

Zork must wait until it collects funds from the insurance companies before it can recognize any revenue, on the grounds that its revenue is not realized until the point of collection.

REVENUE RECOGNITION FRAUD

Though the basic principles of revenue recognition are uncomplicated, it is nonetheless true that a large fraction of financial reporting frauds have been the result of misapplications, often deliberate, of revenue recognition practices prescribed under GAAP. Apart from outright fraud (e.g., recording nonexistent transactions), there were several factors contributing to this unfortunate state of affairs.

First, business practices have continued to grow increasingly complex, involving, among other things, a marked shift from manufacturing to a services-based economy, where the proper timing for revenue recognition is often more difficult to ascertain. Second, there has been an undeniable increase in the willingness of managers, whose compensation packages are often directly linked to the company's stock price and reported earnings, to "stretch" accounting rules to facilitate earnings management. This has particularly been the case where GAAP requirements have been vague or complex. And third, it has been well documented that independent auditors have sometimes been willing to accommodate managements' wishes,

particularly in the absence of specific rules under GAAP to support a denial of such requests. These actions have often had disastrous consequences.

Errors or deliberate distortions involving revenue recognition fall into two categories: situations in which revenue legitimately earned is reported in the incorrect fiscal (financial reporting) period, often referred to as "cutoff" errors, and situations in which revenue is recognized although never actually earned. Given the emphasis on periodic reporting (e.g., quarterly earnings announcements in the case of publicly held entities), even simple "cutoff" errors can have enormous impact, notwithstanding the fact that these should tend to offset over several periods. As a practical matter, all instances of improper revenue recognition are very serious, and these constitute a challenge to all accountants attempting to properly interpret and apply GAAP.

EVOLVING PROBLEMS IN REVENUE RECOGNITION

Certain problems currently found in the application of the general principles of revenue recognition, which can sometimes lead to fraudulent reporting, are discussed in the following paragraphs.

Financial Statement Presentation: Gross vs. Net

In general, it is well established that reporting on a "gross" basis is appropriate when the entity takes ownership of the goods being sold to its customers, with the risks and rewards of ownership accruing to it. For example, if the entity runs the risk of obsolescence or spoilage during the period it holds the merchandise, gross reporting would normally be appropriate. However, if the entity merely acts as an agent for the buyer or seller from whom it earns a commission, then "net" reporting would be more appropriate.

In recent years there have been increasing reports of enterprises that inflate revenues reported in their income statements by reporting transactions on a "gross" basis, notwithstanding that the entity's real economic role is as an agent for buyer and/or seller. This distortion became widespread in the case of Internet companies and other start-up businesses typically not reporting earnings, for which market valuations were heavily influenced by absolute levels of and trends in gross revenues. Reporting revenues "gross" rather than "net" often had an enormous impact on the perceived value of those enterprises.

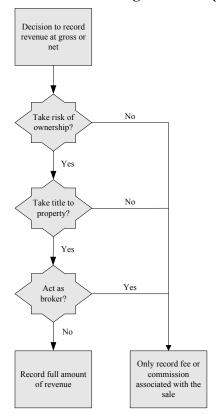
The following factors should be considered when determining whether revenue is to be reported as the net retainage (hereinafter, "net") or the gross amount billed to a customer ("gross"). None of the indicators are presumptive or determinative, although the relative strength of each indicator is to be considered.

- Is the company the primary obligor in the arrangement; that is, is the company responsible for the fulfillment of the order, including the acceptability of the product or service to the customer? If the company, rather than a supplier, is responsible, that fact is a strong indicator that the company records revenue gross. Responsibility for arranging transportation for the product is not responsibility for fulfillment. If a supplier is responsible for fulfillment, including the acceptability to the customer, that fact indicates that the company recognizes only the net retainage.
- Does the company have general inventory risk? General inventory risk exists if a company takes title to a product before the product is ordered by a customer or will take title to the product if the customer returns it (provided that the customer has a right of return). In considering this indicator, arrangements with a supplier that reduce or mitigate the company's risk level are to be considered. Unmitigated general inventory risk is a strong indicator that the company recognizes revenue gross.
- Does the company have physical loss inventory risk? Physical loss inventory risk exists if the title to the product is transferred to the company at the shipping point and then transferred to the customer upon delivery. Physical loss inventory risk also exists if a company takes title to the product after the order is received but before the product is transferred to the shipper. While less persuasive than general inventory risk, this indicator provides some evidence that a company records revenue gross.
- Does the company establish the selling price? If a company establishes the selling price, that fact may indicate that the company recognizes revenue gross.
- Is the amount earned by the company fixed? If a company earns a fixed amount per transaction or if it earns a percentage of the selling price, that fact may indicate that the company reports revenue net.
- Does the company change the product or perform part of the service? If a company changes the product (beyond packaging) or performs part of the service ordered by the customer such that the selling price is greater as a result of the company's efforts, that fact is indicative that a company recognizes revenue gross. Marketing skills, market coverage, distribution system, and reputation are not to be evaluated in determining whether the company changes the product or performs part of the service.

- Does the company have multiple suppliers for the product or service ordered by the customer? If a company has the discretion to select the supplier, that fact may indicate that the company records revenue gross.
- Is the company involved in determining the nature, type, characteristics, or specifications of the product or service by the customer? If so, that fact may indicate that the company records revenue gross.
- Does the company have credit risk for the amount billed to the customer? Credit risk exists if a company must pay the supplier after the supplier performs, regardless of whether the customer has paid. If the company has credit risk, this fact provides weak evidence that the company records revenue gross. If the supplier assumes the credit risk, the company is to record revenue net.

The decision tree in Exhibit 1.1 shows the criteria that a company must pass before it can record revenue at the gross amount. All the criteria must be satisfied; otherwise, only the commission or broker fee associated with the sale can be recorded as revenue.

Exhibit 1.1: Decision tree for recording revenue at gross or net



Barter Transactions

Barter transactions (nonmonetary exchanges) are not a problem, assuming that they represent the culmination of an earnings process. However, in recent years there have been reports of transactions that appear to have been concocted merely to create the illusion of revenue-generating activities. Examples include advertising swaps engaged in by some entities, most commonly "dot-com" enterprises, and the excess capacity swaps of fiber-optic communications concerns under "indefeasible right to use" agreements. Both these and many other situations involved immediate recognition of revenues coupled with deferred recognition of costs, and typically, in aggregate, were equal exchanges not providing profits to either party. Furthermore, these examples do not represent culminations of the normal earnings process (e.g., fiber-optic networks were built in order to sell communications services to end users, not for the purpose of swapping capacity with other similar operations).

In hindsight, most observers can see why these and many other aggressive reporting practices deviated from established or implied GAAP; although there are still some who insist that because GAAP failed to explicitly address these precise scenarios, the accounting for the transactions was open to interpretation. Since GAAP cannot possibly hope to address all the various innovative transaction structures that exist and will be invented, it is necessary to apply basic principles and reason by analogy to newly emerging circumstances. Of great importance to financial statement preparers (and internal and external auditors) are obtaining a thorough understanding of the nature and normal operations of the business enterprise being reported upon, application of "substance over form" reasoning, and the goal of faithfully representing the economics of transactions.

Channel Stuffing

Many difficult issues of revenue recognition involve practices that may or may not involve GAAP departures, depending on the facts and circumstances. Channel stuffing is a prime example of this issue, where sales are actually made prior to the period-end cutoff but are stimulated by "side agreements," such as a promise to customers of extended return privileges or more liberal credit terms. In such circumstances, there might be a greater likelihood that a substantial portion of these sales may be subsequently nullified, as unrealistically large orders inevitably lead to later large returns made for full credit.

For purposes of financial reporting under GAAP, valuation allowances should be established for expected sales returns and allowances. (In practice, however, this is rarely done because the amounts involved are im-

material, unlike the amounts of the more familiar allowances for uncollectible accounts.) The use of valuation accounts for anticipated returns and allowances is dictated by both the matching concept (recording returns and allowances in the same fiscal period in which the revenue is recognized) as well as by the requirement to present accounts receivable at net realizable value. When the potential product returns are not subject to reasonable estimation (as when a sales promotion effort of the type just described is first being attempted by the reporting entity) but could be material, it might not be permissible to recognize revenues at all, pending subsequent developments. Furthermore, from the SEC's perspective, factors such as the following could require deferral of revenues at the time goods are shipped to customers, pending resolution of material uncertainties:

- 1. Significant levels of product inventory in the distribution channel
- 2. Lack of "visibility" into, or the inability to determine or observe, the levels of inventory in a distribution channel and the current level of sales to end users
- 3. Expected introductions of new products that may result in the technological obsolescence of, and larger than expected returns of, current products
- 4. The significance of a particular distributor to the company's (or a reporting segment of the company's) business, sales, and marketing
- 5. The newness of a product
- The introduction of competitors' products with superior technology or greater expected market acceptance could affect market demand and changing trends in that demand for an entity's products.

Mischaracterization of Extraordinary or Unusual Transactions as Components of Gross Revenue

Not all revenue recognition errors and frauds involve questions of when or if revenue should be recognized. In some instances, classification in the income statement is of greater concern. While matters in this group often do not result in a distortion of net results of operations, they can seriously distort important indicators of performance trends. When this occurs, it most often involves reporting unusual or infrequent gains on sales of segments or specific assets as revenue from product or service transactions. A variation on this involves reporting unusual gains as offsets to one or more categories of operating expenses, similarly distorting key financial

ratios and other indicators, again without necessarily invalidating the net income measure.

Mischaracterizing Transactions as Involving "Arm's-Length" Third Parties, Thus Justifying Unwarranted Gain Recognition

Transfers of inventory or other assets to a related entity typically defers gain or income recognition until subsequent transfer to an "arm's-length" party. In some cases, sales have been disguised as being to unrelated entities with gain being recognized, when in fact the "buyer" was a nominee of the seller, or the financing was provided or guaranteed by the seller, or the "buyer" was a "variable interest entity" that failed to meet the complex requirements under GAAP required for gain recognition. Depending on the facts of the situation, this can result in gains being improperly recognized or the gross amount of the transaction being improperly recognized in the seller/transferor's financial statements.

Selling Undervalued Assets to Generate Reportable Gains

This issue again ranges from deliberate but real economic transactions that have as a goal the inflation of reportable revenues or gains, to misrepresented events having no economic substance but the same objective. Among the former is the deliberate invasion of low-cost last-in, first-out (LIFO) inventory "layers," which boosts gross margins and net profits for the period, albeit at the cost of having to later replenish inventories with higher-cost goods. To the extent that this depletion of lower-cost inventory really occurs, there is no GAAP alternative to reflecting these excess profits currently, although the threat of full disclosure may prove to be somewhat of a deterrent.

Regarding the latter category, in some instances the ability to generate gains could indicate that errors occurred in recording a previous transaction. Thus, large gains flowing from the sale of assets recently acquired in a purchase business combination transaction could well mean the purchase price allocation process was flawed. If this is true, a reallocation of purchase price would be called for, and some or all of the apparent gains would be eliminated.

Related to the foregoing is the strategy of retiring outstanding debt in order to generate reportable gains. In periods of higher-than-historical interest rates, lenders will agree to early extinguishment of outstanding obligations at a discount, hence creating gains for the borrower, albeit replacement debt at current yields will result in higher interest costs over future years. To the extent the debt is really retired, however, this is a real

economic event, and the consequent gain is reported in current earnings under GAAP.

Deliberate Misstatement of Percentage of Completion on Long-Term Construction Contracts

Profits on certain long-term construction-type contracts are to be recognized ratably over the period of construction. An obvious and often easy way to distort periodic results of operations is to deliberately over- or understate the degree to which one or more discrete projects has been completed as of period-end. This, coupled with the difficulty and importance of estimating remaining costs to be incurred to complete each project, makes profit recognition under this required method of accounting challenging to verify.

DISCLOSURES

According to the SEC, companies are required to disclose their revenue recognition policies. This should include disclosure of

- The revenue recognition policy for each material type of transaction
- If the company enters into multiple-element sales arrangements (e.g., bundling of related products and/or services), the method of accounting for each element and the method used to determine each element and value it
- Material changes in estimates of returns (e.g., changing the percentage of sales used to establish the allowance)

Sample disclosures are

- 1. The company sells maintenance agreements along with its home air conditioning units. Maintenance revenue is recognized ratably over the term specified within each agreement, which can range from 12 to 60 months. In cases where maintenance agreements are offered to customers at a discount, the company assumes that the discounts really apply to the complete package of air conditioning products and related maintenance agreements, and so recalculates the discount as a percentage of the entire package. This results in approximately 65% of the discounts being assigned to product sales and the remaining 35% to maintenance sales. The adjusted maintenance revenues are then recognized ratably over the term specified within each agreement. As of the balance sheet date, \$1,389,000 of maintenance revenues had not been recognized.
- 2. The company sells electrical appliance monitoring devices to large industrial manufacturers. It charges a nominal amount for each unit

sold and takes 5% of the electricity savings generated from the use of each unit for the first three years after which each unit is installed, up to a maximum of \$5,000 per quarter. Given the uncertainty of the savings to be generated from electricity cost savings, the company does not feel that it can reasonably recognize any revenue until after cost savings have been determined at the end of each quarter. Also, since cost savings tend to be disputed by recipients, making cash receipts problematic, management has elected to further delay revenue recognition until after cash has been received from each customer.

In addition, SEC Regulation S-X requires that each of the following four categories of revenue (and the related costs), if applicable, be stated separately on the face of the income statement:

- 1. Sales of tangible products (net of discounts, returns, and allowances)
- 2. Income from rentals
- 3. Revenue from services
- 4. Other revenues

Bill-and-hold transactions are generally frowned upon, given the risk of abuse by companies that can use this technique to inflate their revenues. Consequently, if any bill-and-hold transactions are used, it is best to disclose this information, clearly stating that the company follows all GAAP requirements for such transactions, and also noting the dollar amount and percentage of revenues involved, and any change in the level of bill-and-hold revenue from the preceding year. An example follows.

During the past year, the company sold \$172,000 of stoves to its restaurant customers under "bill-and-hold" transactions. Under these arrangements, restaurant owners asked the company to retain stoves in its warehouse facilities until new restaurants had been built to accommodate them. These customers acknowledged in writing that they had ordered the inventory, that the company was storing the stoves on their behalf, that they had taken on all risks of ownership, and that the stoves would be delivered in no more than three months. Total bill-and-hold transactions were \$15,000 lower than the \$187,000 in similar transactions that occurred in the preceding year. In both years, bill-and-hold transactions comprised 14% of total company revenues.

Barter transactions should be recognized at the fair market value of the assets received in an exchange. The nature of any such transactions should be disclosed, as well as the approximate value of the transactions and how they are recorded in the financial statements. An example follows.

The company provides aerial traffic reports to a number of radio stations, for which they give airtime to the company. The company then obtains advertising to run on these free minutes, from which it collects the proceeds. The company recognizes revenue from these barter transactions only after advertisements have been obtained and have been run on the participating radio stations. No asset is recorded on the company balance sheet when airtime is received from radio stations, since there is still significant uncertainty that the company will be able to convert the airtime into paid advertisements. In 2010, the revenue recognized from these transactions was \$1,745,000.

Shipments made to a distributor on consignment are not truly sales until sold by the distributor. The exact method of revenue recognition should be clearly disclosed, so readers can be sure that revenue is not recognized too soon in the sales process. Also, inventory may be shipped to a company by its customers on a consignment basis, to be included in custom products that are then sold back to the customers. Only the value added to these custom products should be recognized as revenue. The following footnotes show proper disclosure of these situations:

- 1. The company ships its eyewear products to a number of distributors, having no direct sales function of its own. All shipments to distributors continue to be recorded as inventory by the company until notification of shipment is received from distributors. In selected cases where there has been a problematic payment history by distributors, the company does not record revenue until cash has been received.
- 2. The company produces custom rockets for its payload launch customers. Several customers prefer to supply rocket engines to be incorporated into the company's rockets. Accordingly, these engines are recorded as consignment inventory when received and assigned a zero cost. When the completed rockets are shipped to customers, the price of the consigned engines is not included in the amount billed, thereby reducing the total revenue recognized by the company.

There is no specific GAAP requirement that a company state its policy regarding the use of an allowance for sales returns. However, if a reserve has been created, then a footnote should detail how the amount of the reserve was derived. An example follows.

The company recorded an allowance for sales returns of \$148,000. This amount is based on a historical average rate of return of 12% of the company's subscription magazine business.

If a company has revenues from individual customers that amount to at least 10% of total revenues, then one must report the amount of revenues

from each of these customers as well as the name of the business segment with which these customers are doing business. An example follows.

The company does a significant amount of its total business with two customers. One customer, comprising 15% of total revenues for the entire company, also comprises 52% of the revenues of the appliances segment. The second customer, comprising 28% of total revenues for the entire company, also comprises 63% of the revenues of the government segment.

If sales are concentrated in foreign locations where there are risks of sales reductions due to political issues, then the extent of these sales and the types of risks should be disclosed. An example follows.

The company sells 55% of its customer relationship management software through a distributor in Iran. Given the large proportion of company sales attributable to this supplier, any unrest in the region, such as wars, terrorist activity, or an enforced shutdown in business activities by the Iranian government, would have a material impact on the company's financial results.

REVENUE RECOGNITION POLICIES AND PROCEDURES

The following policies can be used to maintain a proper level of control over a company's timely and consistent application of revenue recognition rules:

- Preliminary revenue summaries shall be issued no later than one day following the close of an accounting period. This policy is designed to prevent the accounting staff from artificially keeping the books open past the end of the reporting period, since it must commit to a specific revenue figure within a day of closing.
- Extended rights of return shall not be allowed. This policy limits the ability of the sales staff to engage in "channel stuffing," since it cannot offer special rights of return to customers in exchange for early sales. The policy keeps a company from gyrating between large swings in sales caused by channel stuffing.
- Special sale discounts shall not be allowed without senior management approval. This policy prevents large bursts in sales caused by special price discounts that can stuff a company's distribution channels, causing rapid sales declines in subsequent periods.
- The company shall not use bill-and-hold transactions. Though bill-and-hold transactions are allowable under clearly defined and closely restricted circumstances, they are subject to abuse and so should generally be avoided. This policy ensures that bill-and-hold transactions would require board approval before being used.

- Estimated profits on service contracts shall be reviewed monthly. This policy ensures that estimated losses on service contracts are identified and recognized promptly, rather than being delayed until the contracts are closed.
- The company shall not engage in barter transactions whose sole purpose is the creation of revenue. This policy informs the accounting staff that it is unacceptable to create barter swap transactions whose sole purpose is to create additional revenue without the presence of any economic reason for the transaction.
- All expenses associated with barter transactions shall be recognized in the same proportions as related revenues. This policy is designed to keep expenses associated with barter swap transactions from being significantly delayed while revenues are recognized up front. The policy will keep profits from being incorrectly recorded in advance.

Shipping Procedure

A key element of the revenue recognition process is consistent use of a procedure for processing shipments to customers, since this is the source of documents later used by the billing department to create invoices. The basic shipment processing procedure is as follows:

- 1. Access the daily schedule of shipments in the computer system and print the report.
- 2. Verify that all finished goods listed on the daily schedule are on hand and available for shipment.
- 3. If the required quantities are not available, contact the customer service staff to ascertain customer wishes regarding partial orders, or contact the production scheduling staff to ensure that the production department will complete the missing products as soon as possible.
- 4. Mark all other items on the daily schedule as being ready for delivery.
- 5. Using the daily schedule, remove all targeted items from the warehouse bins and relocate them to the shipping area.
- 6. Contact freight carriers regarding scheduled pickup times.
- 7. Prepare bills of lading and packing slips for all shipments.
- 8. Load shipments on trucks for delivery.
- 9. Complete the shipping log.
- 10. Send copies of the bills of lading and packing slips to the accounting department by interoffice mail. Include a copy of the day's shipping log, which should match all other documentation sent.

11. Access the computer system and enter the customer, ship date, part number, and quantity shipped for each shipment sent out that day.

Billing Procedure

Once all shipping information has been compiled by the accounting department, its billing staff must convert this information into an invoice that is used to recognize revenue. The billing procedure is as follows:

- 1. Receive the daily packet of shipping information from the ware-house manager. The paperwork should include a handwritten shipping log as well as two copies of the bills of lading. Print the customer order from the computer system. Separate these documents into different piles.
- 2. Verify that there is a bill of lading for every order listed on the shipping log and also that *all* bills of lading are listed on the log. Then put the bills of lading in order, first by customer name and then by order number (if there is more than one order per customer), and match the order forms to them.
- 3. Check the "carrier" column on the shipping log. There is no shipping charge if "customer pickup" is noted. Otherwise, if a carrier name is listed, calculate a freight rate based on the standard freight rate schedule. Note the amount of the freight charge on the order form.
- 4. Go to the invoicing module in the accounting software and access the invoicing screen. Enter the customer name and verify that the Bill To name in the system is correct. If not, change it to match the name listed on the order. Then enter the part number, quantity, and price listed on the order form. Add the freight rate to the bottom of the invoice. Also verify that the sales tax code is correct. Save the invoice record and repeat until all invoices have been entered.
- 5. Verify that the invoice form is correctly positioned in the printer. Run a test invoice if necessary to ensure that the form is properly aligned. Then print the daily invoice batch.
- 6. Burst all printed invoices, with the pink copies going to the alphabetical filing bin, the white copies going to customers, and the goldenrod copies going to the numerical filing bin.
- 7. Stuff the white invoice copies into envelopes and mail them to customers. If the system generates an electronic invoice, e-mail it to the customer.
- 8. Attach the pink invoice copies to the bills of lading, packing slip, and customer orders, and file them by customer name. File the goldenrod copies in numerical order.

Matching Billing to Shipping Log Procedure

Though the two preceding processes form the foundation of a revenue recognition system, it is also possible that various failings in the billing process will result in the underrecognition of revenue that is caused by shipments that are never billed. The following procedure is designed to detect these problems by comparing billing information to the shipping log:

- 1. Go to the warehouse and make a copy of the shipping log for the previous week. Alternatively (if available), access this information online through the receiving system and print out the shipping log.
- 2. Match the shipments listed on the shipping log to invoices issued during the same period. Note all exceptions in the shipping log for missing billings. Also, note on invoices any incorrect quantities that were billed, as well as "leftover" invoices for which there is no shipping record.
- 3. Using the list of shipments for which there are no corresponding invoices, go to the shipping department and obtain bills of lading for the unbilled shipments. If these are not available, determine which freight carrier shipped the items and obtain shipping traces on them. Then create invoices, mail a copy to the customer, and attach proof of delivery to the company's copy of the invoice. File the company's copy in the accounting files.
- 4. Using the list of invoices for which no corresponding shipment is recorded in the shipping log, go back to the company's copy of these invoices and see if there is any bill of lading or other proof of delivery attached to the invoice. If not, call the shipping department to verify that no such documentation exists there. If not, issue a credit to eliminate these invoices.
- 5. Using the list of invoices for which the quantity of product billed is different from the quantity shipped, go back to the company's copy of the invoice and check the attached bill of lading to determine the actual quantity shipped. If the quantity is different, verify this with the shipping department and then either issue a credit (if the quantity billed was too high) or an additional invoice (if the quantity billed was too low).

Pricing Review Procedure

It is also possible (if not likely) that some invoices will contain pricing errors, which will result in improper revenue recognition. The following procedure is designed to detect these errors:

- 1. Go to the accounting software and access the invoice register for the past month.
- 2. Convert the invoice register to an Excel file. Open the Excel file and sort the invoice list by dollar order. Delete all invoices from the list that do not have a credit balance.
- 3. Search the description field for each credit for wording regarding corrections of pricing errors. Retain these records and delete all others. Print the spreadsheet.
- 4. Transfer the following information to a separate spreadsheet report: credit number, credit amount, customer name, correct price, actual price charged, the quantity of product to which the correction applies, the grand total pricing error, and the initials of the customer service person who processed the credit.
- 5. Go to the customer service person who processed the credit and determine the cause of the pricing error. Include this information on the spreadsheet.
- 6. Print the spreadsheet and distribute it to the sales manager, controller, and chief operating officer.
- 7. Enter the total number of pricing errors and the total dollar error in the monthly corporate statistics report.

Bill-and-Hold Procedure

A common tool for reporting excessively high revenue levels is to bill customers for shipments that the company has not yet shipped, ostensibly because the customer has requested that the goods be kept in storage at the company's location. However, some of these "bill-and-hold" transactions are valid but present invoicing challenges because there is no product shipment to trigger a billing. The following procedure can be used to ensure that revenue is properly recognized:

- 1. Access the warehouse database on a specific recurring date and call up the report listing all bill-and-hold items currently in stock. Take the report to the warehouse and verify that all items listed on the report match what is in stock, and also trace all items in stock back to the report. Investigate any variances.
- 2. If the invoice number associated with each bill-and-hold item is not already listed in the report, retrieve this information from the file containing the last period's bill-and-hold transactions. Compare this information to the validated warehouse report and note any items that have not yet been billed.
- 3. For all bill-and-hold items not yet billed, print the Acknowledgment of Bill-and-Hold Transaction form (as shown in Exhibit 1.2)

- and fax it to the authorized customer representative, with a request that it be signed and sent back.
- 4. Once the signed form has been received, verify that all signature spots have been signed. Then attach a copy of the customer's purchase order to the form, copy both, and send them to the billing staff for invoicing. Put the originals in a pending file.
- 5. Once the accounting staff creates the invoice, it will return an invoice copy. Attach this copy to the signed form and customer purchase order, staple them together, and file them by customer name.
- 6. When bill-and-hold items are eventually shipped to the customer, the warehouse staff removes them from the inventory database and sends the bill of lading to the accounting person handling the bill-and-hold transactions. This person removes the transaction's previously filed invoice packet from the files, attaches to it the bill of lading, and forwards the complete package to the billings staff, which then files the packet in the completed invoices file.

Exhibit 1.2: Acknowledgment of bill-and-hold transaction form

Acknowledgment of Bill-and-Hold Transaction								
Customer Name:								
This document indicates your acknowledgment that a bill-and-hold transaction exists in regard to purchase order number, which you ordered from [company name]. Please indicate your acknowledgment of this transaction by initialing next to each of the following statements and signing at the bottom of the page. If you disagree with any of the statements, please indicate your concerns at the bottom of the page. Thank you!								
I agree that I ordered the items noted in the purchase order. (initial)								
$\underline{\hspace{1cm}}$ I agree that [company name] is storing the items noted in the pur- (initial) chase order on my behalf.								
I acknowledge that I have taken on all risks of ownership related to (initial) this purchase order.								
I agree that I requested the bill-and-hold transaction, and my reason (initial) for doing so is as follows:								
I agree that all performance issues related to this purchase order were (initial) completed no later than								
I agree that the held goods will be delivered to me no later than								

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REVENUE RECOGNITION CONTROLS

The following controls can be used to spot transactional errors or attempts to alter the reported level of revenue for the standard revenue recognition systems:

• Investigate all journal entries increasing the size of revenue. Any time a journal entry is used to increase a sales account, this should be a "red flag" indicating the potential presence of revenues that were not created through a normal sales journal transaction. These transactions can be legitimate cases of incremental revenue recognition associated with prepaid services, but can also be barter swap transactions or fake transactions whose sole purpose is to increase revenues.

It is especially important to review all sales transactions where the offsetting debit to the sales credit is *not* accounts receivable or cash. This is a prime indicator of unusual transactions that may not really qualify as sales. For example, a gain on an asset sale or an extraordinary gain may be incorrectly credited to a sales account that would mislead the reader of a company's financial statements that its operating revenues have increased.

- Compare the shipping log and shipping documents to invoices issued at period-end. This control is designed to spot billings on transactions not completed until after the reporting period closed. An invoice dated within a reporting period whose associated shipping documentation shows the transaction as having occurred later is clear evidence of improper revenue reporting. If invoices are based on services instead of goods provided, then invoices can be matched to service reports or time sheets instead.
- Issue financial statements within one day of the period-end. By eliminating the gap between the end of the reporting period and the issuance of financial statements, it is impossible for anyone to create

- additional invoices for goods shipping subsequent to the period-end, thereby automatically eliminating any cutoff problems.
- Compare customer-requested delivery dates to actual shipment dates. If customer order information is loaded into the accounting computer system, run a comparison of the dates on which customers have requested delivery to the dates on which orders were actually shipped. If there is an ongoing tendency to make shipments substantially early, there may be a problem with trying to create revenue by making early shipments. Of particular interest is when there is a surge of early shipments in months when revenues would otherwise have been low, indicating a clear intention to increase revenues by avoiding customer-mandated shipment dates. It may be possible to program the computer system to not allow the recording of deliveries if the entered delivery date is prior to the customer-requested delivery date, thereby effectively blocking early revenue recognition.
- Compare invoice dates to the recurring revenue database. In cases where a company obtains a recurring revenue stream by billing customers periodically for maintenance or subscription services, there can be a temptation to create early billings in order to record revenue somewhat sooner. For example, a billing on a 12-month subscription could be issued after 11 months, thereby accelerating revenue recognition by one month. This issue can be spotted by comparing the total of recurring billings in a month to the total amount of recurring revenue for that period as compiled from the corporate database of customers with recurring revenue. Alternatively, compare the recurring billing dates for a small sample of customers to the dates on which invoices were actually issued.
- Identify shipments of product samples in the shipping log. A product that is shipped with no intention of being billed is probably a product sample being sent to a prospective customer, marketing agency, and so on. These should be noted as product samples in the shipping log, and the internal audit staff should verify that each of them was properly authorized, preferably with a signed document.
- Verify that a signed Acknowledgment of Bill-and-Hold Transaction has been received for every related transaction. If a company uses bill-and-hold transactions, then this control is absolutely mandatory. By ensuring that customers have agreed in advance to be billed for items to be kept in the company's warehouse, one can be assured of being in compliance with the strict GAAP and IFRS rules applying to these transactions. Also, a continual verification of this paperwork (shown earlier in Exhibit 1.2) will keep managers from

- incorrectly inflating revenues by issuing false bill-and-hold transactions.
- Confirm signed Acknowledgment of Bill-and-Hold Transactions with customers. If a company begins to match bill-and-hold acknowledgment letters to invoices issued to customers (see last control), the logical reaction of any person who wants to fraudulently continue issuing bill-and-hold invoices is to create dummy acknowledgments. Consequently, it is useful to contact the persons who allegedly signed the acknowledgments to verify that they actually did so.
- Do not accept any product returns without an authorization number. Customers will sometimes try to return products if there is no justification required, thereby clearing out their inventories at the expense of the company. This can be avoided by requiring a return authorization number, which must be provided by the company in advance and prominently noted on any returned goods. If the number is not shown, the receiving department is required to reject the shipment
- Compare related company addresses and names to customer list. Compare the list of company subsidiaries to the customer list to determine if any intercompany sales have occurred and whether these transactions have all been appropriately backed out of the financial statements. Since employees at one subsidiary may conceal this relationship by using a false company name or address, verify the same information at all the other subsidiaries by matching subsidiary names and addresses to their supplier lists, since it is possible that the receiving companies are *not* trying to hide the intercompany sales information.
- Require a written business case for all barter transactions. Require the creation of a business case detailing why a barter transaction is required and what type of accounting should be used for it. The case should be approved by a senior-level manager before any associated entry is made in the general ledger. The case should be attached to the associated journal entry and filed. This approach makes it less likely that sham barter swap transactions will be created.
- Verify that cash-back payments to customers are charged to sales. Compare the customer list to the cash disbursements register to highlight all cash payments made to customers. Investigate each one and verify that the revenue account was debited in those in-

stances where cash-back payments were made. This should not apply to the return of overpayments made by customers to the company.

- Create a revenue accounting procedure to specify the treatment of gross or net transactions. When a company deals with both gross and net revenue transactions on a regular basis, there should be a procedure that clearly defines for the accounting staff the situations under which revenues shall be treated on a gross or net basis. This reduces the need for internal audit reviews (see next control) to detect revenue accounting problems after the fact.
- Review the revenue accounting for potential pass-through transactions. In situations where there is either an extremely high cost of goods sold (indicating a possible pass-through transaction) or where there is no clear evidence of the company's acting as principal, taking title to goods, or accepting risk of ownership, the internal audit staff should review the appropriateness of the transaction.
- Trace commission payments back to underlying sale transactions. Keep a list of all business partners who pay the company commissions, and run a periodic search on all payments made by them to the company. The internal audit staff can then trace these payments back to the underlying sales made by the company and verify that they were recorded at net, rather than at gross.

The controls noted here are not comprehensive; additional controls are listed in subsequent chapters that apply to more detailed revenue recognition scenarios.