PART I

ACCOUNTING STANDARDS

CHAPTER 1

REVENUE RECOGNITION

When Can I Report Revenue at Gross Instead of Net?

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 which it earns a commission, "net" reporting would be more appropriate. These factors are indicators that revenue should be recorded at its gross amount:

- The company that is the primary obligor in the arrangement is the company responsible for the fulfillment of the order, including the acceptability of the product or service to the customer.
- The company has general inventory risk. This 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.
- The company has physical loss inventory risk. This exists if the title to the product is transferred to the company at the shipping point and then transferred to the customer upon delivery.
- The company establishes the selling price.
- The company changes the product or performs part of the service.
- The company has multiple suppliers for the product or service ordered by the customer.
- The company is involved in determining the nature, type, characteristics, or specifications of the product or service by the customer.
- The company has credit risk for the amount billed to the customer. This exists if the company must pay

the supplier irrespective of whether the customer has paid.

A company should record revenue at its net value if a preponderance of the preceding bullet points were not the case, and especially if it is being paid what is in essence a commission.

How Does the Installment Method Work?

Under the *installment method*, revenue recognition is deferred until the period of cash collection. The seller recognizes both revenues and cost of sales at the time of the sale; however, the related gross profit is deferred to those periods in which cash is collected. The installment method can be used in most sales transactions for which payment is to be made through periodic installments over an extended period of time and the collectibility of the sales price cannot be reasonably estimated. This method is applicable to the sales of real estate, heavy equipment, home furnishings, and other merchandise sold on an installment basis. The six to use in accounting for sales under the installment method are presented next.

1. During the current year, record sales and cost of sales in the regular manner. Record installment sales transactions separately from other sales. Set up installment accounts receivable identified by the year of sale (e.g., Installment Accounts Receivable—2010).
2. Record cash collections from installment accounts receivable. Cash receipts must be properly identified as to the year in which the receivable arose.
3. At the end of the current year, transfer installment sales revenue and installment cost of sales to deferred gross profit properly identified by the year of sale. Compute the current year's gross profit rate on installment sales as follows:

$$\text{Gross profit rate} = 1 - \left(\frac{\text{Cost of installment sales}}{\text{Installment sales revenue}}\right)$$

Alternatively, the gross profit rate can be computed as follows:

$$\text{Gross profit rate} = \frac{\text{Installment sales revenue} - \text{Cost of installment sales}}{\text{Installment sales revenue}}$$

4. Apply the current year's gross profit rate to the cash collections from the current year's installment sales

to compute the realized gross profit from the current year's installment sales.

Realized gross profit =
Cash collections from current year's installment sales × Current year's gross profit rate

5. Separately apply each of the previous years' gross profit rates to cash collections from those years' installment sales to compute the realized gross profit from each of the previous years' installment sales.

Realized gross profit =
Cash collections from previous years' installment sales × Previous years' gross profit rate

6. Defer the current year's unrealized gross profit to future years. The deferred gross profit to carry forward to future years is computed as follows:

Deferred gross profit (2010) =
Ending balance installment account receivable (2010) × Gross profit rate (2010)

Can I Recognize Revenue When There Is a Right of Return?

A company can record revenue from a sales transaction at the time of the sale if all of the next conditions are met, and the company must accrue any estimated losses (such as warranty or sales returns) at the same time:

- The sale price is fixed on the sale date.
- The buyer is obligated to pay the seller.
- The buyer's payment obligation would not be changed if the product is subsequently damaged or destroyed.
- The seller does not have significant future performance obligations connected to the sale.
- The amount of future returns can be reasonably estimated.

When Can I Record Bill-and-Hold Sales?

In a *bill-and-hold* situation, a company bills its customer but stores the sold goods on behalf of the customer. This scenario presents a high risk for fraud, since customers may not agree to or be aware of the sales. Accordingly, all of the next factors must be present before a bill-and-hold transaction can be recorded as revenue:

- The customer requests this arrangement.
- The customer has a substantial business purpose for doing so.
- There is a fixed delivery schedule to the customer.
- The goods are both segregated and ready for shipment.

How Does the Percentage-of-Completion Method Work?

The principal method for recognizing revenue under a long-term construction contract is the *percentage-of-completion method*. It recognizes income as work on a contract (or group of closely related contracts) progresses. The recognition of revenues and profits is related to costs incurred in providing the services required under the contract.

Under this method, work in progress (WIP) is accumulated in the accounting records. If the cumulative billings to date under the contract exceed the amount of the WIP plus the portion of the contract's estimated gross profit attributable to that WIP, the contractor recognizes a current liability captioned "billings in excess of costs and estimated earnings." This liability recognizes the remaining obligation of the contractor to complete additional work prior to recognizing the excess billing as revenue.

If the reverse is true—that is, the accumulated WIP and gross profit earned exceed billings to date—the contractor recognizes a current asset captioned "costs and estimated earnings in excess of billings." This asset represents the portion of the contractor's revenues under the contract that have been earned but not yet billed under the contract provisions. Where more than one contract exists, these assets and liabilities are determined on a project-by-project basis, with the accumulated assets and liabilities being separately stated on the balance sheet. Assets and liabilities are not offset unless a right of offset exists. Thus, the net debit balances for certain contracts are not ordinarily offset against net credit balances for other contracts.

How Does the Completed-Contract Method Work?

The *completed-contract method* recognizes income only when a construction contract is complete or substantially complete. It is most commonly used for shorter-duration contracts or when it is not possible to use the percentage-of-completion method.

Under this method, contract costs and related billings are accumulated in the accounting records and reported as deferred items on the balance sheet until the project is complete or substantially complete. A contract is regarded as substantially complete if remaining costs of completion are immaterial. When the accumulated costs (WIP) exceed the related billings, the excess is presented as a current asset (inventory account). If billings exceed related costs, the difference is presented as a current liability. This determination is also made on a project-by-project basis with the accumulated assets and liabilities being stated separately on the balance sheet. An excess of accumulated costs over related billings is presented as a current asset, and in most cases an excess of accumulated billings over related costs is presented as a current liability.

What Types of Pricing Arrangements Are Used in Contracts?

There are four types of contracts based on their pricing arrangements.

1. *Fixed-price contracts.* Contracts for which the price is not usually subject to adjustment because of costs incurred by the contractor. The contractor bears the risks of cost overruns.
2. *Time-and-materials contracts.* Contracts that provide for payments to the contractor based on direct labor hours at fixed rates and the contractor's cost of materials.
3. *Cost-type contracts.* Contracts that provide for reimbursement of allowable or otherwise defined costs incurred plus a fee representing profits.
4. *Unit-price contracts.* Contracts under which the contractor is paid a specified amount for every unit of work performed.

EXAMPLE

Domino Construction Inc. enters into a government contract to construct an early warning radar dome. The contract amount is for $1,900,000, on which Domino expects to incur costs of $1,750,000 and earn

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a profit of $150,000. Costs expected to be incurred on the project are:

Concrete pad	175,000
Pad installation labor	100,000
Radar dome	1,150,000
Dome installation labor	325,000
Total cost	1,750,000

This is a two-month project, where a concrete pad is installed during the first month and a prefabricated dome is assembled on the pad during the second month. To comply with bank loan agreements, complete generally accepted accounting principles (GAAP)–basis financial statements are prepared by Domino at each month-end. Domino encounters problems pouring the concrete pad, requiring its removal and reinstallation. The extra cost incurred is $175,000. During the second month, in order to meet the completion deadline, Domino spends an extra $35,000 on overtime for the dome construction crew. Domino records different billable amounts and profits under these five contract scenarios:

1. *Fixed-price contract.* At the end of the first month of work, Domino has already lost all of its profit and expects to incur an additional loss of $25,000. It then incurs an additional loss of $35,000 in the second month. Domino issues one billing upon completion of the project. Its calculation of losses on the contract is presented next.

	Month 1	**Month 2**
Total billing at completion	1,900,000	1,900,000
– Expected total costs	(1,750,000)	(1,925,000)
– Additional costs	(175,000)	(35,000)
+ Loss already recorded	—	25,000
= Loss to record in current period	(25,000)	(35,000)

2. *Cost plus fixed fee.* Domino completes the same project but bills it to the government at cost at the end of each month and also bills a $150,000 fixed fee at the end of the project that is essentially a project management fee and which comprises all

of Domino's profit. The project completion entry follows.

	Month 1	Month 2	Totals
Expected material costs	175,000	1,150,000	1,325,000
+ Additional material costs	175,000	–	175,000
+ Expected labor costs	100,000	325,000	425,000
+ Additional labor costs	–	35,000	35,000
+ Fixed fee	–	150,000	150,000
= Total billing	450,000	1,660,000	2,110,000

3. *Cost plus award.* Domino completes the same cost-plus-fixed-fee contract just described but also bills the government an additional $50,000 for achieving the stipulated construction deadline, resulting in a total profit of $200,000. The project completion entry is presented next.

	Month 1	Month 2	Totals
Expected material costs	175,000	1,150,000	1,325,000
+ Additional material costs	175,000	–	175,000
+ Expected labor costs	100,000	325,000	425,000
+ Additional labor costs	–	35,000	35,000
+ Fixed fee	–	150,000	150,000
+ Timely completion bonus	–	50,000	50,000
= Total billing	450,000	1,710,000	2,160,000

4. *Time-and-materials contract with no spending cap.* Domino completes the same project but bills all costs incurred at the end of each month to the government. The additional material cost of the concrete pad is billed at cost, while the overtime incurred is billed at a standard hourly rate with a 25% markup. Domino's profit is contained within the markup on its labor billings. Domino records a profit on the project of $115,000 on total billings of $2,075,000. Its calculation of profits on the contract is:

	Month 1	Month 2	Totals
Expected material costs	175,000	1,150,000	1,325,000
+ Additional material costs	175,000	–	175,000

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	Month 1	Month 2	Totals
+ Expected labor costs	100,000	325,000	425,000
+ Additional labor costs	–	35,000	35,000
+ 25% profit on labor costs billed	25,000	90,000	115,000
= Total billing	475,000	1,600,000	2,075,000

5. *Time-and-materials contract with spending cap.* Domino completes the same time-and-materials project just described, but the contract authorization is divided into two task orders: one authorizing a spending cap of $450,000 on the concrete pad installation while the other caps spending on the radar dome at $1,500,000. Domino records a loss of $10,000 on total billings of $1,950,000. Its calculation of profits on the contract is:

	Month 1	Month 2	Totals
Expected material costs	175,000	1,150,000	1,325,000
+ Additional material costs	175,000	–	175,000
+ Expected labor costs	100,000	325,000	425,000
+ Additional labor costs	–	35,000	35,000
+ 25% profit on labor costs billed	25,000	90,000	115,000
– Spending cap limitation	(25,000)	(100,000)	(125,000)
= Total billing	450,000	1,500,000	1,950,000

How Do I Account for Contract Losses?

When the current estimate of total contract costs exceeds the current estimate of total contract revenues, a provision for the entire loss on the entire contract is made. Losses are recognized in the period in which they become evident. The loss is computed on the basis of the total estimated costs to complete the contract, including the contract costs incurred to date plus estimated costs (use the same elements as contract costs incurred) to complete. The loss is presented as a separately captioned current liability on the balance sheet.

In any year when a percentage-of-completion contract has an expected loss, the amount of the loss reported in that year is computed in this way:

Reported loss =
Total expected loss + All profit previously recognized

How Do I Account for Additional Claims under a Contract?

Claims represent amounts in excess of the agreed-on contract price that a contractor seeks to collect from customers for unanticipated additional costs. The recognition of additional contract revenue relating to claims is appropriate if it is probable that the claim will result in additional revenue and if the amount can be estimated reliably. All of the next four conditions must exist in order for the probable and estimable requirements to be satisfied.

1. The contract or other evidence provides a legal basis for the claim.
2. Additional costs are not the result of deficiencies in the contractor's performance.
3. Additional costs are identifiable and reasonable.
4. The evidence supporting the claim is objective and verifiable, not based on management's "feel" for the situation or on unsupported representations.

How Does the Deposit Method Work?

The *deposit method* is used in a real estate sale where the sale is, in substance, the sale of an option and not real estate. The seller does not recognize any profit and does not record a receivable. Cash received from the buyer (initial and continuing investments) is reported as a deposit on the contract. However, some cash may be received that is not subject to refund, such as interest on the unrecorded principal. These amounts are used to offset any carrying charges on the property. If the interest collected on the unrecorded receivable is refundable, the seller records this interest as a deposit before the sale is completed and then includes it as a part of the initial investment once the sale is consummated. If deposits on retail land sales eventually are recognized as sales, the interest portion of the deposit is recognized separately as interest income. For contracts that are canceled, the nonrefundable amounts are recognized as income and the refundable amounts are returned to the depositor at the time of cancellation.

EXAMPLE

Elbrus Investments enters into two separate property acquisition transactions with the Buena Vista Land Company.

1. Elbrus pays a $50,000 deposit and promises to pay an additional $800,000 to buy land and a building in an area not yet properly zoned for the facility Elbrus intends to construct. Final acquisition of the property is contingent upon these zoning changes. Buena Vista does not record the receivable, and records the deposit with the following entry:

Cash	50,000	
Customer deposits		50,000

Part of the purchase agreement stipulates that Buena Vista will retain all interest earned on the deposit and that 10% of the deposit is nonrefundable. Buena Vista earns 5% interest on Elbrus's deposit over a period of four months, resulting in $208 of interest income that is offset against the property tax expenses of the property with the next entry:

Cash	208	
Property tax expense		208

Immediately thereafter, the required zoning changes are turned down, and Elbrus cancels the sales contract. Buena Vista returns the refundable portion of the deposit to Elbrus and records the nonrefundable portion as income with this entry:

Customer deposits	50,000	
Income from contract cancellation		10,000
Cash		40,000

2. Elbrus pays a $40,000 deposit on land owned and being improved by Buena Vista. Elbrus immediately begins paying $5,000/month under a four-year, 7% loan agreement totaling $212,000 of principal payments and agrees to pay an additional $350,000 at closing, subject to the land being approved for residential construction. After two

months, Buena Vista has earned $167 of refundable interest income on Elbrus's deposit and has been paid $7,689 of refundable principal and $2,311 of refundable interest on the debt. Buena Vista records these events with the next entry.

Cash	10,167	
Customer deposits		10,167

The land is approved for residential construction, triggering sale of the property. Buena Vista's basis in the property is $520,000. Buena Vista uses the next entry to describe completion of the sale.

Cash	350,000	
Note receivable	204,311	
Customer deposits	50,167	
Gain on asset sale		84,478
Land		520,000

How Do I Account for Installation Fees?

A fee may be charged to install equipment. If customers normally cannot purchase the equipment in a separate transaction, the installation fee is considered an advance charge for future services. The fee is recognized as revenue over the estimated service period. The costs of installation and the installed equipment are amortized over the period the equipment is expected to generate revenue. If customers normally can purchase the equipment in a separate transaction, the installation fee is part of a product transaction that is accounted for separately as such.

EXAMPLE

Vintner Corporation has invented a nitrogen injection device for resealing opened wine bottles, which it calls NitroSeal. The device is especially useful for restaurants, which can seal wine bottles opened for customers who want to take home unfinished wine. Because the NitroSeal device is massive, Vintner pays

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a third party to install each unit for a fixed fee of $200, charging restaurants a $300 nonrefundable installation fee plus a monthly fee for a 20-month cancelable contract. The initial entries to record an installation charge from a supplier and related installation billing to a customer are:

Installation asset	200	
Accounts payable		200
Accounts receivable	300	
Unearned installation fees (liability)		300

Vintner recognizes the installation revenue and associated installation expense for each installation in 1/20 increments to match the contract length, each with this entry:

Unearned installation fees	15	
Installation revenue		15
Installation expense	10	
Installation asset		10

A customer cancels its contract with Vintner after 5 months. As a result, Vintner accelerates all remaining amortization on the installation asset and recognizes all remaining unearned installation fees at once, using the next entries.

Unearned installation fees	225	
Installation revenue		225
Installation expense	150	
Installation asset		150

If the service contract had included a clause for a refundable installation fee, then cancelation after five months would still have resulted in immediate acceleration of amortization on the installation asset. However, the unearned installation revenue could not be recognized. Instead, this entry would have recorded the return of the installation fee:

Unearned installation fees	225	
Cash		225

What Recognition Methods Can I Use for Service Billings?

Once a transaction is determined to be a service transaction, one of four methods is used to recognize revenue. The method chosen is to be based on the nature and extent of the service(s) to be performed.

1. *Specific performance method.* This method is used when performance consists of the execution of a single act. Revenue is recognized at the time the act takes place. For example, a stockbroker records sales commissions as revenue upon the sale of a client's investment.
2. *Proportional performance method.* This method is used when performance consists of a number of identical or similar acts.

   a. If the service transaction involves a specified number of identical or similar acts, an equal amount of revenue is recorded for each act performed.
   b. If the service transaction involves a specified number of defined but not identical or similar acts, the revenue recognized for each act is based on this formula:

$$\frac{\text{Direct cost of individual act}}{\text{Total estimated direct costs of the transaction}} \times \text{Total revenues from complete transaction}$$

   c. If the service transaction involves an unspecified number of acts over a fixed time period for performance, revenue is recognized over the period during which the acts will be performed by using the straight-line method unless a better method of relating revenue and performance is appropriate.

EXAMPLE

The Cheyenne Snow Removal Company enters into a contract with the Western Office Tower to plow its parking lot. The contract states that Cheyenne will receive a fixed payment of $500 to clear Western's central parking lot whenever snowfall exceeds two inches. Following an unusually snowy winter, Western elects to cap its snow removal costs by tying Cheyenne into an annual $18,000 fixed price for snow removal, no matter how many snowstorms occur. Snowfall is not

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predictable by month and can occur over as much as a six-month period. Western pays the full amount in advance, resulting in the next entry by Cheyenne.

Cash	18,000	
Customer advances		18,000

Although Cheyenne could recognize revenue on a straight-line basis through the contract period, it chooses to tie recognition more closely to actual performance with the proportional performance method. Its total estimated direct cost through the contract period is likely to be $12,600, based on its average costs in previous years. There is one snowstorm in October, which costs Cheyenne $350 for snow removal under the Western contract. Cheyenne's revenue recognition calculation in October is

$$\frac{\$350 \text{ direct cost}}{\$12,600 \text{ total direct cost}} \times \$18,000 \text{ total revenue}$$
$$= \$500 \text{ revenue recognition}$$

Thus, Cheyenne recognizes a gross margin of $150 during the month. By the end of February, Cheyenne has conducted snow removal 28 times at the same margin, resulting in revenue recognition of $14,000 and a gross margin of $4,200. Cheyenne's cumulative entry for all performance under the Western contract to date is:

Customer advances	14,000	
Direct labor expense	9,800	
Revenue		14,000
Cash		9,800

In March, Cheyenne removes snow 12 more times at a cost of $4,200. Its initial revenue recognition calculation during this month is

$$\frac{\$4,200 \text{ direct cost}}{\$12,600 \text{ total direct cost}} \times \$18,000 \text{ total revenue}$$
$$= \$6,000 \text{ revenue recognition}$$

However, this would result in total revenue recognition of $20,000, which exceeds the contract fixed fee by $2,000. Accordingly, Cheyenne only recognizes sufficient revenue to maximize the contract cap, resulting in a loss of $200 for the month.

Customer advances	4,000	
Direct labor expense	4,200	
Revenue		4,000
Cash		4,200

3. *Completed performance method.* This method is used when more than one act must be performed and when the final act is so significant to the entire transaction taken as a whole that performance cannot be considered to have taken place until the performance of that final act occurs.
4. *Collection method.* This method is used in circumstances when there is a significant degree of uncertainty surrounding the collection of service revenue. Under this method, revenue is not recognized until the cash is collected.

How Do I Record Revenue for Franchise Sales?

Revenue is recognized, with a provision for bad debts, when the franchisor has substantially performed all material services or conditions. Only when revenue is collected over an extended period of time and collectibility cannot be predicted in advance would the use of the installment method of revenue recognition be appropriate. Substantial performance means:

- The franchisor has no remaining obligation to either refund cash or forgive any unpaid balance due.
- Substantially all initial services required by the agreement have been performed.
- No material obligations or conditions remain.

If initial franchise fees are large compared to services rendered and continuing franchise fees are small compared to services to be rendered, a portion of the initial fee is deferred in an amount sufficient to cover the costs of future services plus a reasonable profit, after considering the impact of the continuing franchise fee.

EXAMPLE

Shanghai Oriental Cuisine sells a Quack's Roast Duck franchise to Toledo Restaurants. The franchise is renewable after two years. The initial franchise fee is $50,000, plus a fixed fee of $500 per month. In exchange, Shanghai provides staff training, vendor relations support, and site selection consulting. Each month thereafter, Shanghai provides $1,000 of free local advertising. Shanghai's typical gross margin on franchise start-up sales is 25%.

Because the monthly fee does not cover the cost of monthly services provided, Shanghai defers a portion of the initial franchise fee and amortizes it over the two-year life of the franchise agreement, using the next calculation.

Cost of monthly services provided $1000 × 24 months	= $24,000
÷ Markup to equal standard 25% gross margin	= .75
= Estimated revenue required to offset monthly services provided	= $32,000
Less: Monthly billing to franchise $500 × 24 months	= $12,000
= Amount of initial franchise fee to be deferred	= $20,000

Shanghai's entry to record the franchise fee deferral follows.

Franchise fee revenue	20,000	
Unearned franchise fees (liability)		20,000

Shanghai recognizes 1/24 of the unearned franchise fee liability during each month of the franchise period on a straight-line basis, which amounts to $833.33 per month.