PART I

Commonly Used Generally Accepted Accounting Principles

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CHAPTER 1

Financial Statement Reporting: The Income Statement

The reporting requirements of the income statement, balance sheet, statement of changes in cash flows, and interim reporting guidelines must be carefully examined. Individuals preparing personal financial statements have to follow certain unique reporting requirements, as do those who are accounting for a partnership. Points to note are:

- Income statement preparation involves proper revenue and expense recognition. The income statement format is highlighted in this chapter along with the earnings per share computation.
- Balance sheet reporting covers accounting requirements for the various types of assets, liabilities, and stockholders' equity.
- The statement of cash flows presents cash receipts and cash payments classified according to investing, financing, and operating activities. Disclosure is also provided for certain noncash investment and financial transactions. A reconciliation is provided between reported earnings and cash flow from operations.
- Interim financial reporting allows for some departures from annual reporting, such as the gross profit method to estimate inventory. The tax provision is based on the effective tax rate expected for the year.
- Personal financial statements show the worth of the individual. Assets and liabilities are reflected at current value in the order of maturity.

This chapter deals with the reporting requirements on the income statement. Chapter 2 deals with the balance sheet, and Chapter 3 covers the remaining statements.

IFRS Connection

The elements of financial statements are assets, liabilities, equity, income, and expenses.

Presentation of comparative financial statements is mandatory. Accordingly, the first statements must include at least one year of comparative information.

Personal financial statements are not specifically addressed by the International Financial Reporting Standards (IFRS).

Income Statement Format

With respect to the income statement, the certified public accountant (CPA)'s attention is addressed to:

- Income statement format
- Comprehensive income
- Extraordinary items
- Nonrecurring items
- Discontinued operations
- Revenue recognition methods
- Accounting for research and development costs
- Presentation of earnings per share

How are items on the income statement arranged?

In the preparation of the income statement, continuing operations are presented before discontinued operations.

Starting with income from continuing operations, the format of the income statement is:

Income from continuing operations before tax
Less: Taxes
Income from continuing operations after tax
Discontinued operations:
Income from discontinued operations (net of tax)
Loss or gain on disposal of a division (net of tax)
Income before extraordinary items
Extraordinary items (net of tax)
Net income

Note

Earnings per share is shown on the income statement items as well.

Comprehensive Income

What is comprehensive income?

Comprehensive income is the change in equity occurring from transactions and other events with nonowners. It excludes investment (disinvestment) by owners.

What are the two components of comprehensive income?

Comprehensive income consists of two components: net income and "other comprehensive income." Net income plus "other comprehensive income" equals comprehensive income.

What does "other comprehensive income" include?

Per Accounting Standards Codification (ASC) 220-10-45-3, *Comprehensive Income: Overall* (Statement of Financial Accounting Standards [SFAS] FAS-130, *Reporting Comprehensive Income*), "other comprehensive income" includes:

- Foreign currency translation gain or loss
- Unrealized gain or loss on available-for-sale securities
- Change in market value of a futures contract that is a hedge of an asset reported at present value

How is comprehensive income reported?

ASC 220-10-45-3 has three acceptable options of reporting comprehensive income and its components. We present the best and most often used option, which is an income statement–type format:

Statement of Income and Comprehensive Income

Net Income		$400,000
Other Comprehensive Income		
Foreign Currency Translation Gain	$20,000	
Unrealized Loss on Available-for-Sale Component	(3,000)	
		17,000
Comprehensive Income		$417,000

The "other comprehensive income" items reported in the income statement are for the current-year amounts only. The total "other comprehensive income" for all the years is presented in the stockholders' equity section of the balance sheet as "accumulated other comprehensive income."

IFRS Connection

The statement of equity must not report the components of comprehensive income.

Extraordinary Items

What are extraordinary items?

Extraordinary items are those that are both unusual in nature and infrequent in occurrence.

- "Unusual in nature" means the event is abnormal and not related to the typical operations of the entity.
- "Infrequent in occurrence" means the transaction is not anticipated to take place in the foreseeable future, taking into account the corporate environment.

- The environment of a company includes consideration of industry characteristics, geographical location of operations, and extent of government regulation.
- Materiality is considered by judging the items individually and not in the aggregate. However, if items arise from a single specific event or plan, they should be aggregated.

Extraordinary items are shown net of tax between income from discontinued operations and net income.

What are some typical extraordinary items?

Extraordinary items include:

- Casualty losses
- Losses on expropriation of property by a foreign government
- Gain on life insurance proceeds
- Gain on troubled debt restructuring
- Loss from prohibition under a newly enacted law or regulation

Exception

Losses on receivables and inventory occur in the normal course of business and therefore are not extraordinary. Losses on receivables and inventory are extraordinary, however, if they relate to a casualty loss (e.g., earthquake) or governmental expropriation (e.g., banning of product because of a health hazard).

IFRS Connection

IFRS does not permit special reporting for extraordinary items.

Nonrecurring Items

What are nonrecurring items?

Nonrecurring items are items that are either unusual in nature or infrequent in occurrence. They are shown as a separate line item before tax in arriving at income from continuing operations. *Example:* The gain or loss on the sale of a fixed asset.

Discontinued Operations

How is a discontinued operation defined?

A discontinued operation is an operation that has been discontinued during the year or will be discontinued shortly after year-end. A discontinued operation may be a business segment that has been sold, abandoned, or spun off.

The two components of discontinued operations are:

1. Income or loss from operations
2. Loss or gain on disposal of division

What disclosure requirements apply to a discontinued activity?

Footnote disclosure regarding the discontinued operation should include:

- An identification of the segment
- Disposal date
- The manner of disposal
- Description of remaining net assets of the segment at year-end

A business segment is a major line of business or customer class. Even though it may be operating, a formal plan to dispose of it exists.

IFRS Connection

Under IFRS, a discontinued operation must be a major line of business or geographic segment. Also, under IFRS, separate disclosure must be made of the cash flows of the discontinued operation.

How do we present discontinued operations?

In an annual report, the income of a component classified as held for sale is presented in discontinued operations in the year(s) in which the income occurs. Phase-out losses are not accrued.

Example 1.1

ABC Company produces and sells consumer products. It has a number of product groups, each with different product lines and brands. For this company, a product group is the lowest level at which the operations and cash flows can be distinguished, operationally and for financial reporting purposes, from the rest of the company. ABC Company has suffered losses related to specific brands in its beauty product group. It has opted to get out of this group.

ABC commits to a plan to sell the beauty product group, and therefore classifies it as held for sale at that date. The operations and cash flows of the group will be eliminated from the ongoing operations of ABC because of the sale transaction, and the company will not have any continuing involvement in

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the activities of the beauty product component. Therefore, ABC should report in discontinued operations, the activities of the group while it is classified as held for sale.

Assume ABC instead decides to continue in the beauty care business but discontinue the brands with which the losses are associated. Because these brands are part of a larger cash-flow-generating product group and, in the aggregate, do not constitute a group that on its own is a component of ABC, the conditions for reporting in discontinued operations the losses associated with the brands that are discontinued would not be satisfied.

The income of a component of a business that either has been disposed of or is held for sale is reported in discontinued operations only when *both* these criteria have been satisfied:

- The profit and cash flows of the component have been (or will be) eliminated from the ongoing operations of the company due to the disposal decision.
- The company will not have any major ongoing involvement in the activities of the component subsequent to the disposal decision.

In general, gain or loss from operations of the discontinued component should include operating gain or loss incurred and the gain or loss on disposal of a component taking place in the current period. Gains should not be recognized until the year actually realized.

IFRS Connection

IFRS defines revenue to include both revenues and gains. U.S. generally accepted accounting principles (GAAP) provide separate definitions for revenues and gains.

Revenue Recognition

What are the various ways of recording revenue?

Revenue, which is associated with a gross increase in assets or a decrease in liabilities, can be recognized under different methods depending on the circumstances. (Special revenue recognition guidelines exist for franchisors and in sales involving a right of return. A product financing arrangement may also exist.) The basic methods of recognition include:

- Realization
- Completion of production
- During production
- Cash basis

Realization

When is revenue normally realized?

Revenue is realized (recognized) when goods are sold or services are performed. Realization results in an increase in net assets. This method is almost always used. At realization, the earnings process is complete. Further, realization is consistent with the accrual basis of accounting, meaning that revenue is recognized when earned rather than when received. Realization should be used when:

- The selling price is determinable.
- Future costs can be estimated.
- An exchange has taken place that can be objectively measured.

> **Note**
>
> There must be a reasonable basis for determining anticipated bad debts.

Three other methods of revenue recognition are used in exceptional situations, as discussed next.

At the Completion of Production

When can revenue be recognized upon completion of production?

Revenue is recognized prior to sale or exchange.

REQUIREMENTS There must be:

- A stable selling price
- Absence of material marketing costs to complete the final transfer
- Interchangeability in units

This approach is used:

- With agricultural products, by-products, and precious metals when the aforementioned criteria are met
- In accounting for construction contracts under the completed contract method

During Production

When can I recognize revenue during production?

In the case of long-term production situations, revenue recognition is made when both of the following conditions exist:

- An assured price for the completed item exists by contractual agreement.
- A reliable measure of the degree of completion at various stages of the production process is possible.

Example: The percentage of completion method can be used in accounting for long-term construction contracts.

Which is preferable—the completed contract method or the percentage of completion method?

Under the completed contract method, revenue should not be recognized until completion of a contract. In general, the completed contract method should be used only when the use of the percentage of completion method is inappropriate.

How is revenue matched with costs in the percentage of completion method?

Under the percentage of completion method, revenue is recognized as production activity is occurring. The gradual recognition of revenue, levels out earnings over the years and is more realistic than the completed contract method since revenue is recognized as performance takes place.

Recommendation

The percentage of completion method is preferred over the completed contract method and should be used when reliable estimates of the extent of completion in each period are possible. If not, the completed contract method should be used. Percentage of completion results in a matching of revenue against related expenses in the benefit period.

Using the cost-to-cost method, revenue recognized for the period equals:

$$\frac{\text{Actual costs to date}}{\text{Total estimated costs}} \times \text{Contract price} = \text{Cumulative revenue}$$

Revenue recognized in prior years is deducted from the cumulative revenue to determine the revenue in the current period.

Example 1.2

Given:

- Cumulative revenue (years 1–4)
- Revenue recognized (years 1–3)
- Revenue (year 4–current year)

Revenue less expenses equals profit.

In year 4 of a contract, the actual costs to date are $50,000. Total estimated costs are $200,000. The contract price is $1,000,000. Revenue recognized in the prior years (years 1–3) is $185,000.

$$\frac{\$50,000}{\$200,000} \times \$1,000,000 = \$250,000 \text{ Cumulative revenue}$$

Cumulative Revenue	$250,000
Prior-Year Revenue	$185,000
Current-Year Revenue	$ 65,000

Journal entries under the construction methods using assumed figures follow.

	Percentage of Completion		Completed Contract	
Construction-in-Progress	$100,000		$100,000	
Cash		$100,000		$100,000
Construction Costs				
Progress Billings	80,000			
Receivable			80,000	
Progress Billings on Construction-in-Progress		80,000		80,000
Periodic Billings				
Construction-in-Progress	25,000		No entry	
Profit		25,000		

In the final year when the construction project is completed, the following additional entries are made to record the profit in the final year:

	Percentage of Completion	Completed Contract
Progress Billings on Construction in Progress	Total Billings	Total Billings
Construction in Progress	Cost +	Cost
Profit	Profit Incremental Profit for Last Year	Profit for All the Years

Construction in Progress less Progress Billings is shown net. Usually a debit figure results, which is shown as a current asset. Construction in Progress is an inventory account for a construction company. If a credit balance occurs, the net amount is shown as a current liability.

Note

Regardless of whether the percentage of completion method or the completed contract method is used, conservatism dictates that an obvious loss on a contract should be recognized immediately even before contract completion.

IFRS Connection

IFRS prohibits the use of the completed contract method of accounting for long-term construction contracts. Companies must use the percentage of completion method. If revenues and costs are difficult to estimate, then companies recognize revenue only to the extent of the cost incurred—a zero-profit approach.

Cash Basis

When is cash basis, rather than accrual basis, preferable or required?

In the case of a company selling inventory, the accrual basis is used. However, the cash basis of revenue recognition is used under certain circumstances, namely, when revenue is recognized upon collection of the account. The cash basis instead of the accrual basis must be used when one or more of these situations exist:

- Inability to objectively determine selling price at the time of sale
- Inability to estimate expenses at the time of sale
- Risks as to collection from customer
- Uncertain collection period

How do I compute revenue under the installment method?

Revenue recognition under the installment method equals the cash collected, times the gross profit percent. Any gross profit not collected is deferred on the balance sheet until collection occurs. When collections are received, realized gross profit is recognized by debiting the deferred gross profit account. The balance sheet presentation is:

Accounts Receivable (Cost + Profit)
Less: Deferred Gross Profit
Net Accounts Receivable (Cost)

Note

A service business that does not deal in inventory (e.g., accountant, doctor, lawyer) has the option of using either the accrual basis or the cash basis.

How is revenue recognized if the buyer can return the goods?

When a buyer has a right to return the merchandise bought, the seller can recognize revenue at the time of sale in accordance with ASC 605-15-25-1, *Revenue Recognition: Products* (FAS-48, *Revenue Recognition When Right of Return Exists*), only provided that all of these conditions are satisfied:

- Selling price is known.
- Buyer has to pay for the goods even if the buyer is unable to resell them. *Example:* A sale of goods from a manufacturer to a wholesaler. No provision must exist that the wholesaler has to be able to sell the items to the retailer.
- If the buyer loses the item or it is damaged in some way, the buyer still has to pay for it.
- Purchase by the buyer of the item has economic feasibility.
- Seller does not have to render future performance in order that the buyer will be able to resell the goods.
- Returns may be reasonably estimated.

If any of these criteria are not met, revenue must be deferred along with deferral of related expenses until the criteria have been satisfied or the right of return provision has expired. As an alternative to deferring the revenue, record a memo entry as to the sale.

What factors affect the ability of a company to predict future returns?

These considerations can be used in predicting returns:

- Predictability is hampered when there is technological obsolescence risk of the product, uncertain product demand changes, or other material external factors.
- Predictability is lessened when there is a long time period involved for returns.
- Predictability is enhanced when there exists a large volume of similar transactions.
- The seller's previous experience should be weighed in estimating returns for similar products.
- The nature of the customer relationship and the type of product involved need to be evaluated.

Caution

ASC 605-15-25-1 does not apply to dealer leases, real estate transactions, or service industries.

What is the definition of a financing arrangement?

Per ASC 470-40-25 (FAS-49, *Accounting for Product Financing Arrangements*), the arrangement involving the sale and repurchase of inventory is, in substance, a financing arrangement. It mandates that the product financing arrangement be accounted

for as a borrowing instead of a sale. In many cases, the product is stored on the company's (sponsor's) premises. In addition, often the sponsor will guarantee the debt of the other entity.

Typically, the sponsor eventually uses or sells most of the product in the financing arrangement. However, in some cases, the financing entity may sell small amounts of the product to other parties.

The entity that gives financing to the sponsor is usually an existing creditor, nonbusiness entity, or trust. It is also possible that the financer may have been established *only* for the purpose of providing financing for the sponsor.

Note

Footnote disclosure should be made of the particulars of the product financing arrangement.

What are some types of financing arrangements?

Types of product financing arrangements include:

- Company (sponsor) sells a product to another business and agrees to reacquire the product or one basically identical to it. The established price to be paid by the sponsor typically includes financing and holding costs.
- Sponsor has another company buy the product for it and agrees to repurchase the product from the other entity.
- Sponsor controls the distribution of the product that has been bought by another company in accordance with the aforementioned terms.

Note

In all situations, the company (sponsor) either agrees to repurchase the product at given prices over specified time periods or guarantees resale prices to third parties.

How are financing arrangements reported?

- When the sponsor sells the product to the other firm and in a related transaction agrees to repurchase it, the sponsor should record a liability when the proceeds are received to the degree the product applies to the financing arrangement.

Caution

A sale should not be recorded, and the product should be retained as inventory on the sponsor's books.

- In the case where another firm buys the product for the sponsor, inventory is debited and liability is credited at the time of purchase.
- Costs of the product, except for processing costs, in excess of the sponsor's original production cost or acquisition cost or the other company's purchase cost constitute finance and holding costs. The sponsor accounts for these costs according to its typical accounting policies. Interest costs will also be incurred in connection with the financing arrangement. These should be shown separately and can be deferred.

Example 1.3

On 1/1/2X12, a sponsor borrows $100,000 from another company and gives the inventory as collateral for the loan. The entry is:

Cash	$100,000	
Liability		$100,000

Note

A sale is not recorded here, and the inventory remains on the books of the sponsor. In effect, inventory serves as collateral for a loan.

On 12/31/2X12, the sponsor pays back the other company. The collateralized inventory item is returned. The interest rate on the loan was 8 percent. Storage costs were $2,000. The entry is:

Liability	$100,000	
Interest Expense	8,000	
Storage Expense	2,000	
Cash		$110,000

Recognition of Franchise Fee Revenue by the Franchisor

When can franchise fees be recognized?

According to ASC 952-10-25-4, *Franchisors; Revenue Recognition* (FAS-45, *Accounting for Franchise Fee Revenue*), the franchisor can record revenue from the initial sale of the franchise only when all significant services and obligations applicable to the sale have been substantially performed. Substantial performance is indicated when:

- There is absence of intent to give cash refunds or relieve the accounts receivable due from the franchisee.
- Nothing material remains to be done by the franchisor.
- Initial services have been rendered.

The earliest date on which substantial performance can occur is the franchisee's commencement of operations unless special circumstances can be shown to exist.

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In the case in which it is probable that the franchisor will ultimately repurchase the franchise, the initial fee must be deferred and treated as a reduction of the repurchase price.

How are deferred franchise fee revenues reported?

If revenue is deferred, the related expenses must be deferred for later matching in the year in which the revenue is recognized. This is illustrated next.

Year of initial fee:
Cash
  Deferred Revenue
Deferred Expenses
  Cash

Year when substantial performance takes place:
Deferred Revenue
  Revenue
Expenses
  Deferred Expenses

What are the requirements for initial franchise fees?

In the case in which the initial fee includes both initial services and property (real or personal), there should be an appropriate allocation based on fair market values.

When part of the initial franchise fee applies to *tangible property* (e.g., equipment, signs, inventory), revenue recognition is based on the fair value of the assets. Revenue recognition may take place prior to or after recognizing the portion of the fee related to initial services. *Example:* Part of the fee for equipment may be recognized at the time title passes with the balance of the fee being recorded as revenue when future services are performed.

How do I handle recurring franchise fees?

Recurring franchise fees are recognized as earned and receivable. Related costs are expensed.

Exception

If the price charged for the continuing services or goods to the franchisee is below the price charged to third parties, this indicates that the initial franchise fee was in essence a partial *prepayment* for the recurring franchise fee. In this situation, part of the initial fee has to be deferred and recognized as an adjustment of the revenue from the sale of goods and services at bargain prices.

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Suggestion

The deferred amount should be adequate to meet future costs and generate an adequate profit on the recurring services. This situation may occur if the continuing fees are minimal relative to services provided or if the franchisee has the privilege of making bargain purchases for a particular time period.

When *continuing franchise fees will probably not cover the cost of the continuing services and provide for a reasonable profit* to the franchisor, part of the initial franchise fee should be deferred to satisfy the deficiency and be amortized over the life of the franchise.

What accounting requirements exist?

- *Unearned franchise fees* are recorded at present value. Where a part of the initial fee constitutes a nonrefundable amount for services already performed, revenue should be accordingly recognized.
- *The initial franchise fee is not typically allocated to specific franchisor services* before all services are performed. This practice can be done only if actual transaction prices are available for individual services.
- If the franchisor *sells equipment and inventory* to the franchisee *at no profit*, a receivable and payable are recorded. No revenue or expense recognition is given.
- In the case of a *repossessed franchise*, refunded amounts to the franchisee reduce current revenue. If there is no refund, the franchisor books additional revenue for the consideration retained that was not previously recorded. In either situation, *prospective* accounting treatment is given for the repossession.

Caution

Do not adjust previously recorded revenue for the repossession.

- Indirect costs of an operating and recurring nature are expensed immediately. Future costs to be incurred are accrued no later than the period in which related revenue is recognized. Bad debts applicable to expected uncollectibility of franchise fees should be recorded in the year of revenue recognition.
- Installment or cost recovery accounting may be employed to account for franchisee fee revenue only if a long collection period is involved and future uncollectibility of receivables cannot be accurately predicted.

Requirements

Footnote disclosure is required of:

- Outstanding obligations under agreement
- Segregation of franchise fee revenue between initial and continuing

Other Revenue Considerations

What happens if the vendor gives consideration to a customer?

In general, if the vendor provides the customer something to purchase the vendor's product, such consideration should reduce the vendor's revenue applicable to that sale.

What if the vendor is reimbursed for its out-of-pocket expenses?

The vendor records the recovery of reimbursable expenses (e.g., shipping costs billed to customers, travel costs on service contracts) as revenue.

Note

These costs are not to be netted as a reduction of cost.

How are contributions received recorded?

As per ASC No. 958-605-05 *Not-for-Profit Entities: Revenue Recognition* (FAS-116, *Accounting for Contributions Received and Contributions Made*), contributions received by a donee are recorded at fair market value by debiting the asset account and crediting revenue.

The donor debits contribution expense at fair market value. A gain or loss is recognized if fair market value differs from the book value of the donated asset.

Multiple Deliverables

How are multiple deliverables recognized?

Accounting Standards Update (ASU) No. 2009-13 (October 2009), ASC 605, *Revenue Recognition—Multiple-Deliverable Arrangements*, discusses revenue recognition policy (ASC Topic 205) and provides amendments to ASC Subtopic 605-25, *Revenue Recognition—Multiple-Element Arrangements*, for separating consideration

in multiple-deliverable arrangements. A selling price hierarchy is established to determine the selling price of a deliverable. The selling price used for each deliverable is based on vendor-specific objective evidence if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither of the two aforementioned types of evidence is available.

Arrangement consideration should be allocated at the inception of the arrangement to all deliverables using the relative selling price method. This method allocates any discount in the arrangement proportionally to each deliverable on the basis of each deliverable's selling price.

A vendor must determine its best estimate of selling price consistent with that used to determine the price to sell the deliverable on a stand-alone basis.

What should be disclosed by multiple deliverables?

The following should be disclosed by similar types of arrangements:

- Timing of revenue recognition for separate units of accounting
- Description of multiple-deliverable arrangements, including nature and terms
- Factors and estimates used to determine vendor-specific objective evidence, third-party evidence, or estimated selling price
- Significant deliverables within its arrangements
- General timing of delivery or performance

Software Revenue Recognition

How are revenue arrangements consisting of tangible products and software accounted for?

Accounting Standards Update (ASU) No. 2009-14 (October 2009), ASC 985, *Software—Certain Revenue Arrangements That Include Software Elements*, relates to the accounting for revenue arrangements consisting of tangible products and software. A vendor must sell a particular element separately to assert vendor-specific objective evidence for that element. If a vendor does not have vendor-specific objective evidence for the undelivered element in an arrangement, the revenues for both the delivered and the undelivered elements are combined into one unit of accounting. Any revenue associated to the delivered products is then deferred and recognized at a later date, which in most instances is when the undelivered elements are delivered by the vendor.

Note

The Accounting Standards Update does not affect software revenue arrangements that do not include tangible products. In addition, the Update changes the accounting model for revenue arrangements that include both tangible products and software elements.

If software contained on the tangible product is essential to the tangible products' functionality, the software is excluded from the scope of the software revenue guidance. This exclusion includes essential software that is sold with the product and undelivered software elements that relate to the tangible product's essential software.

Research and Development Costs

How are research and development (R&D) costs defined?

Research is the testing done in search of a new product, service, process, or technique. Research can be aimed at deriving a material improvement to an existing product or process. *Development* is the translation of the research into a design for the new product or process. Development may also result in material improvement in an existing product or process.

How are research and development costs accounted for?

Per ASC 730-10-05-1, *Research and Development: Overall* (FAS-2, *Accounting for Research and Development Costs*), research and development (R&D) costs are expensed as incurred.

IFRS Connection

Under IFRS, development costs, which are costs incurred after technological feasibility is established, are capitalized. This matches U.S. GAAP for software development costs, but not for ordinary R&D.

What are R&D costs?

R&D costs include:

- Salaries of personnel involved in R&D activities
- Rational allocation of indirect (general and administrative) costs

Note

R&D costs incurred under contract for others that are reimbursable are charged to a receivables account rather than expensed. Further, materials, equipment, and intangibles purchased from others that have alternative future benefit in R&D activities are capitalized. The depreciation or amortization on such assets is classified as an R&D expense. If no alternative future use exists, the costs should be expensed.

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If a group of assets is acquired, allocation should be made to those that relate to R&D efforts. When a business combination is accounted for as a purchase, R&D costs are assigned their fair market value.

Expenditures paid to others to conduct R&D activities are expensed.

> **Note**
>
> ASC 730-10-15-4, *Research and Development: Overall* (FAS-2, *Accounting for Research and Development Costs*) does not apply to regulated industries or to the extractive industries (e.g., mining).

What are typical activities that may or may not be included as R&D?

R&D activities include:

- Formulation and design of product alternatives and testing thereof
- Laboratory research
- Engineering functions until the point the product satisfies operational requirements for manufacture
- Design of tools, molds, and dies involving new technology
- Preproduction prototypes and models
- Pilot plant costs

Examples of activities that are not for R&D include:

- Quality control
- Seasonal design changes
- Legal costs of obtaining a patent
- Market research
- Identification of breakdowns during commercial production
- Engineering of follow-up in the initial stages of commercial production
- Rearrangement and start-up activities, including design and construction engineering
- Recurring and continuous efforts to improve the product
- Commercial use of the product

> **Note**
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> According to ASC 985-20-25, *Software: Costs of Software to Be Sold, Leased, or Marketed* (FAS-86, *Accounting for the Costs of Computer Software to Be Sold,*
>
> (*continued*)

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Leased, or Otherwise Marketed), costs incurred for computer software to be sold, leased, or otherwise marketed are expensed as R&D costs until technological feasibility exists, as indicated by the development of a detailed program or working model. After technological feasibility exists, software production costs should be deferred and recorded at the lower of unamortized cost or net realizable value. EXAMPLES: Debugging the software, improvements to subroutines, and adaptations for other uses.

Amortization begins when the product is available for customer release. The amortization expense should be based on the higher of:

- The percent of current revenue to total revenue from the product
- The straight-line amortization amount

What are the requirements if another party funds R&D?

Per ASC 730-20-25, *Research and Development: Research and Development Arrangements* (FAS-68, *Research and Development Arrangements*), if a business enters into an arrangement with other parties to fund the R&D efforts, the nature of the obligation must be determined. In the case where the entity has an obligation to repay the funds regardless of the R&D results, a liability has to be recognized with the related R&D expense. The journal entries are:

Cash
Liability
Research and Development Expense
Cash

A liability does not exist when the transfer of financial risk involved to the other party is substantive and genuine. If the financial risk applicable to R&D is transferred because repayment depends *only* on the R&D possessing future economic benefit, the company accounts for its obligation as a contract to conduct R&D for others. In this case R&D costs are capitalized, and revenue is recognized as earned and becomes billable under the contract.

Requirement

Footnote disclosure is made of the terms of the R&D agreement, the amount of compensation earned, and the costs incurred under the contract.

What if loans or advances are to be repaid depending on R&D results?

When repayment of loans or advances to the company depends *only* on R&D results, such amounts are deemed R&D costs incurred by the company and charged to expense.

How are warrants or other financial vehicles handled?

If warrants or other financial instruments are issued in an R&D arrangement, the company records part of the proceeds to be provided by the other parties as paid-in capital based on the financial instruments' fair market value on the arrangement date.

Advertising Costs

How are advertising costs accounted for?

Advertising must be expensed as incurred or when the advertising program first occurs. The cost of a billboard should be deferred and amortized.

Restructuring Charges

How are restructuring charges treated?

Restructuring charges are expensed as incurred. In general, an expense and a liability should be accrued for employee termination costs. Disclosure should be made of the group and number of employees laid off.

Other Expense Considerations

Start-up costs, including organization costs and moving costs, are expensed as incurred.

Earnings per Share

Who must compute earnings per share?

ASC 260-10-50-1, *Earnings per Share: Overall* (FAS-128, *Earnings per Share*), requires that publicly held companies must compute earnings per share (EPS). This is not required of nonpublic companies. In a simple capital structure, no potentially dilutive securities exist. "Potentially dilutive" means the security will be converted into common stock at a later date, reducing EPS. Thus, only one EPS figure is necessary. In a complex capital structure, dilutive securities exist, requiring dual presentation.

What do basic earnings per share and diluted earnings per share take into account?

Basic EPS takes into account only the actual number of outstanding common shares during the period (and those contingently issuable in certain cases). Diluted EPS includes the effect of common shares actually outstanding and the impact of convertible securities, stock options, stock warrants, and their equivalents if dilutive.

How are basic EPS and diluted EPS calculated?

Basic EPS = Net income available to common stockholders ÷ Weighted-average number of common shares outstanding.

Diluted EPS = Net income available to common stockholders + Net of tax interest and/or dividend savings on convertible securities ÷ Weighted-average number of common shares outstanding + Effect of convertible securities + Net effect of stock options.

How do I calculate the weighted-average common stock outstanding?

Weighted-average common stock shares outstanding takes into account the number of months in which those shares were outstanding.

Example 1.4

On 1/1/2X12, 10,000 shares were issued. On 4/1/2X12, 2,000 of those shares were bought back by the company. The weighted-average common stock outstanding is:

$$\left(10{,}000 \times \frac{3}{12}\right) + \left(8{,}000 \times \frac{9}{12}\right) = 8{,}500 \text{ shares}$$

Note

When shares are issued because of a stock dividend or stock split, the computation of weighted-average common stock shares outstanding mandates retroactive adjustment as if the shares were outstanding at the beginning of the year.

Example 1.5

These events occurred during the year for a common stock:

Shares outstanding—1/1	30,000
2-for-1 stock split—4/1	30,000
Shares issued—8/1	5,000

The number of common shares to be used in the denominator of basic EPS is 62,083 shares, computed:

1/1–3/31: 30,000 × 3/12 × 2	15,000
4/1–8/1: 60,000 × 4/12	20,000
8/1–12/31: 65,000 × 5/12	27,083
Total	62,083

What are the mechanics of the calculation of EPS?

In the numerator of the EPS fraction, net income less preferred dividends represents earnings available to common stockholders. On cumulative preferred stock, preferred dividends for the current year are subtracted out whether paid or not. Further, preferred dividends are subtracted out only for the current year. *Example:* If preferred dividends in arrears were for five years, all of which were paid plus the sixth-year dividend, only the sixth-year dividend (current year) is deducted. Preferred dividends for each of the prior years would have been deducted in those years.

In computing EPS, preferred dividends are subtracted out only on preferred stock that was not included as a common stock equivalent. If the preferred stock is a common stock equivalent, the preferred divided would not be subtracted out since the equivalency of preferred shares into common shares is included in the denominator.

As for the denominator of EPS, if convertible bonds are included, they are considered as equivalent to common shares. Thus, interest expense (net of tax) has to be added back in the numerator.

Example 1.6

This information is presented for a company:

Preferred stock, $10 par value, 6% cumulative, 30,000 shares issued and outstanding	$300,000
Common stock, $5 par value, 100,000 shares issued and outstanding	500,000
Net income	400,000

The company paid a cash dividend on preferred stock. The preferred dividend would therefore equal $18,000 (6% × $300,000). Basic EPS equals $3.82, computed as:

(*continued*)

(*Continued*)

Earnings Available to Common Stockholders	
Net income	$400,000
Less: Preferred dividends	(18,000)
Earnings available to common stockholders	$382,000

Basic EPS = $382,000/100,000 shares = $3.82

Example 1.7

On January 1, 2X12, Dauber Company had these shares outstanding:

Preferred stock, $100 par value, 6% cumulative	150,000 shares
Common stock, $5 par value	500,000 shares

During the year, these events occurred:

- On April 1, 2X12, the company issued 100,000 shares of common stock.
- On September 1, 2X12, the company declared and issued a 10 percent stock dividend.
- For the year ended December 31, 2X12, the net income was $2,200,000.

Basic EPS for the year 2X12 equals $2.06 ($1,300,000/632,500 shares), calculated as:

Earnings Available to Common Stockholders	
Net income	$2,200,000
Less: Preferred dividend (150,000 shares × $6)	900,000
Earnings available to common stockholders	$1,300,000
Weighted-average number of outstanding common shares	
1/1/2X12–3/31/2X12 (500,000 × 3/12 × 110%)	137,500
4/1/2X12–8/31/2X12 (600,000 × 5/12 × 110%)	275,000
9/1/2X12–12/31/2X12 (660,000 × 4/12)	220,000
Weighted-average outstanding common shares	632,500

Diluted Earnings per Share

If potentially dilutive securities exist that are outstanding, such as convertible bonds, convertible preferred stock, stock options, or stock warrants, both basic and diluted earnings per share must be presented.

How does the if-converted method work?

In the case of convertible securities, the *if-converted method* must be used. Under this approach, it is assumed that the dilutive convertible security is converted into common stock at the beginning of the period, or the date of issue if later. If conversion is assumed, the interest expense (net of tax) that would have been incurred on the convertible bonds must be added back to net income in the numerator. Any dividend on convertible preferred stock would also be added back (dividend savings) to net income in the numerator. The add-back of interest expense (net of tax) on convertible bonds and preferred dividends on convertible preferred stock, results in an adjusted net income figure used to determine earnings per share. Correspondingly, the number of common shares the convertible securities are convertible into (or their weighted-average effect if conversion to common stock actually took place during the year) must also be added to the weighted-average outstanding common shares in the denominator.

How does the treasury stock method work?

In the case of dilutive stock options, stock warrants, or their equivalent, the *treasury stock method* is used. Under this method, there is an assumption that the option or warrant was exercised at the beginning of the period, or the date of grant if later. The assumed proceeds received from the exercise of the option or warrant are assumed to be used to buy treasury stock at the average market price for the period. However, exercise is presumed to occur only if the average market price of the underlying shares during the period is greater than the exercise price of the option or warrant. This presumption ensures that the assumed exercise of a stock option or warrant will have a dilutive effect on the earnings per share computation. Correspondingly, the denominator of diluted earnings per share increases by the number of shares assumed issued, owing to the exercise of options or warrants reduced by the assumed treasury shares bought.

Example 1.8

One hundred shares are under a stock option plan at an exercise price of $10. The average market price of the company's stock during the period is $25. The assumed issuance of common shares, because of the assumed exercise of the stock options, is 60 shares, computed as:

Issued shares from option	100 shares × $10 = $1,000
Less: Treasury shares	40 shares* × $25 = $1,000
Additional shares that must be issued to satisfy option holders	60 shares

*It is assumed that 1,000/$25 = 40 shares were acquired.

If options are granted as part of a stock-based compensation arrangement, the assumed proceeds from the exercise of the options under the treasury stock method

include deferred compensation and the resulting tax benefit that would be credited to paid-in capital arising from the exercise of the options.

What about the denominator of diluted EPS?

As a result of the if-converted method for convertible dilutive securities and the treasury stock method for stock option plans and warrants, the denominator of the diluted earnings per share computation equals the weighted-average outstanding common shares for the period plus the assumed issue of common shares arising from convertible securities plus the assumed shares issued because of the exercise of stock options or stock warrants, or their equivalent.

Example 1.9

This example assumes the same information about the Dauber Company given in Example 1.7. It is further assumed that potentially dilutive securities outstanding include 5 percent convertible bonds (each $1,000 bond is convertible into 25 shares of common stock) having a face value of $5,000,000. There are options to buy 50,000 shares of common stock at $10 per share. The average market price for common shares is $25 per share for 20X2. The tax rate is 30 percent.

Basic earnings per share = Net income available to common stockholders divided by weighted-average number of common shares outstanding = $1,300,000/632,500 shares = $2.06

Diluted earnings per share equals:		
Income for diluted earnings per share:		
Earnings available to common stockholders		$1,300,000
Interest expense on convertible bonds ($5,000,000 × 0.05)	$250,000	
Less: Tax savings ($250,000 × 0.30)	(75,000)	
Interest expense (net of tax)		175,000
Income for diluted earnings per share		$1,475,000
Shares outstanding for diluted EPS:		
Weighted-average outstanding common shares		$ 632,500
Assumed issued common shares for convertible bonds (5,000 bonds × 25 shares)		125,000
Assumed issued common shares from exercise of option	$ 50,000	
Less: Assumed repurchase of treasury shares [(50,000 × $10 = $500,000)/$25]	(20,000)	30,000
Shares outstanding for diluted EPS		787,500

Diluted EPS for 2X12 is $1.87 ($1,475,000/787,500 shares). Diluted EPS must be disclosed because the two securities (the 5 percent convertible bond and the stock options) had an aggregately dilutive effect on EPS. That is, EPS decreased from $2.06 to $1.87. The required disclosures are indicated next.

Earnings per Share Disclosure	
Basic earnings per share	$2.06
Diluted earnings per share	$1.87

Antidilutive Securities

Are antidilutive securities included in EPS?

In computing EPS, all antidilutive securities should be ignored. A security is considered to be antidilutive if its inclusion does not cause EPS to go down. In computing EPS, the aggregate of all dilutive securities must be taken into account. However, in order to exclude the ones that should not be used in the computation, it is necessary to determine which securities are individually dilutive and which ones are antidilutive. As was previously noted, a stock option will be antidilutive if the underlying market price of the stock that can be bought is less than the exercise price of the option. A convertible security is antidilutive if the exercise of the convertible bond or preferred stock results in an increase in the EPS computation compared to that derived before the assumed conversion. In this case, the additive effect to the numerator and denominator as a result of the conversion causes EPS to increase. In both cases, the antidilutive securities should be ignored in the calculation.

Example 1.10

A company's net income for the year is $100,000. A 10 percent $2,000,000 convertible bond was outstanding all year that was convertible into 2,000 shares of common stock. The weighted-average number of shares of common stock outstanding all year was 200,000. The income tax rate was 30 percent.

Basic EPS = $100,000/200,000 shares = $0.50
Diluted EPS = $100,000 + $200,000 (1 − 0.30) = $240,000, divided by 200,000 + 2,000 shares = $240,000/202,000 shares = $1.19

Because EPS increased as a result of the inclusion of the convertible bond, the bond is antidilutive and should be excluded from the calculation. Only basic EPS should be disclosed here.

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Example 1.11

Davis Company has basic EPS of $14 for 2X12. There were no conversions or exercises of convertible securities during the year. However, possible conversion of convertible bonds would have reduced EPS by $2. The impact of possible exercise of stock options would have increased EPS by $0.38. Diluted EPS for 2X12 equals $12 ($14 – $2).

Note

The dilutive convertible bonds are taken into account in deriving diluted EPS, but the stock options are ignored because they have an antidilutive effect.

What are the reporting requirements for EPS?

Disclosure of EPS should include:

- Information on the capital structure
- Explanation of the computation of EPS
- Identification of common stock equivalents
- Assumptions made
- Number of shares converted

Rights and privileges of the securities should also be disclosed, including:

- Dividend and participation rights
- Call prices
- Conversion ratios
- Sinking fund requirements

Another point to remember is:

- A stock conversion may materially affect EPS if it has taken place at the beginning of the year.

Recommendation

Supplementary footnote disclosure should be made reflecting on an “as-if” basis what the effects of these conversions would have been on EPS if they were made at the start of the accounting period.

- If a subsidiary has been acquired under the *purchase accounting method* during the year, the weighted-average shares outstanding for the year are used from the purchase date.

- If common stock or a common stock equivalent is sold during the year and the proceeds are used to buy back debt or retire preferred stock, there should be a presentation of supplemental EPS figures.
- When comparative financial statements are presented, there is a retroactive adjustment for stock splits and stock dividends.
- When a prior-period adjustment occurs that causes a restatement of previous years' earnings, EPS should also be restated.

Example 1.12

Assume that in 2X12 a 10 percent stock dividend occurs. The weighted-average shares used for previous years' computations have to be increased by 10 percent to make EPS data comparable.