



# CMA | Exam Review

# Study Guide

**Part 1** | Financial Planning,  
Performance, and Analytics

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Edition

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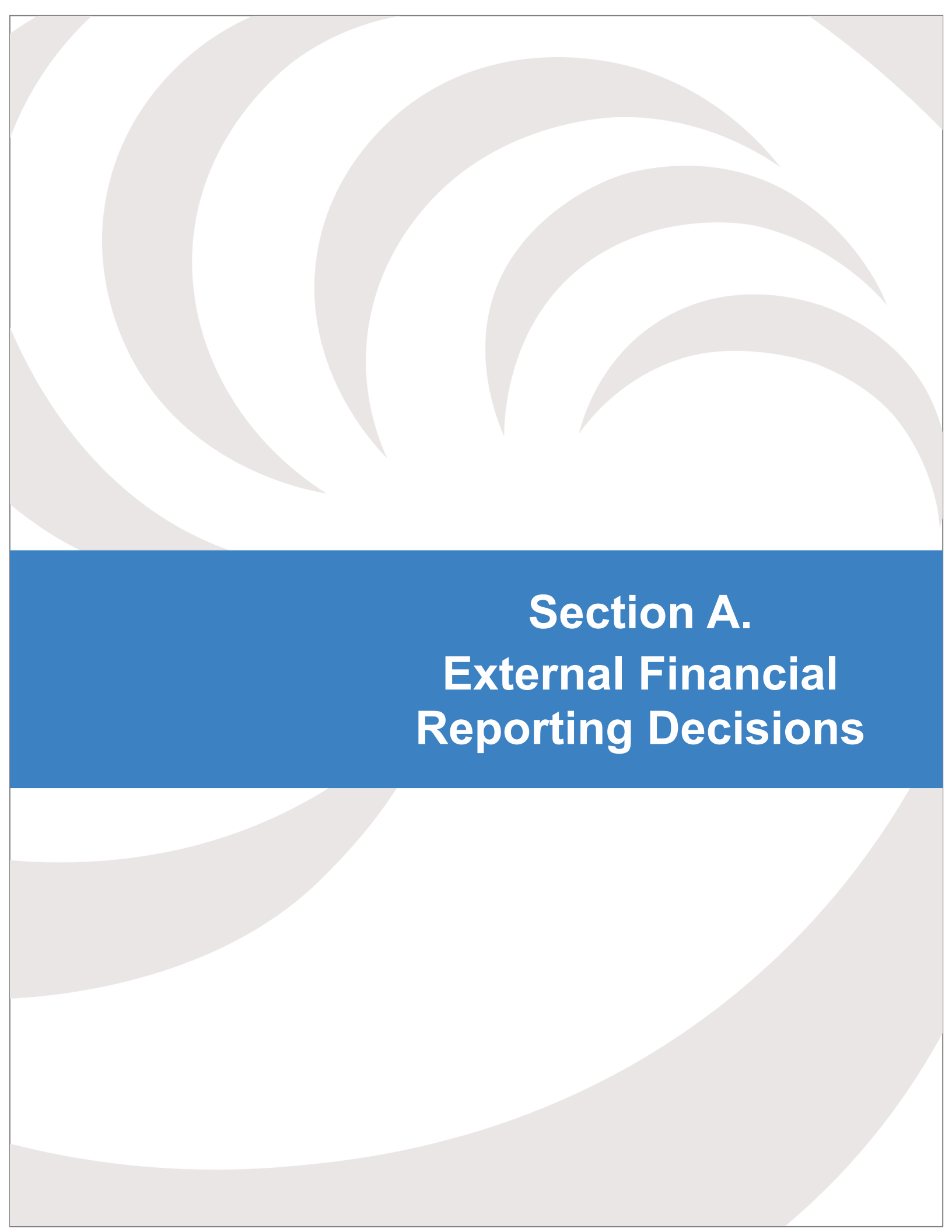
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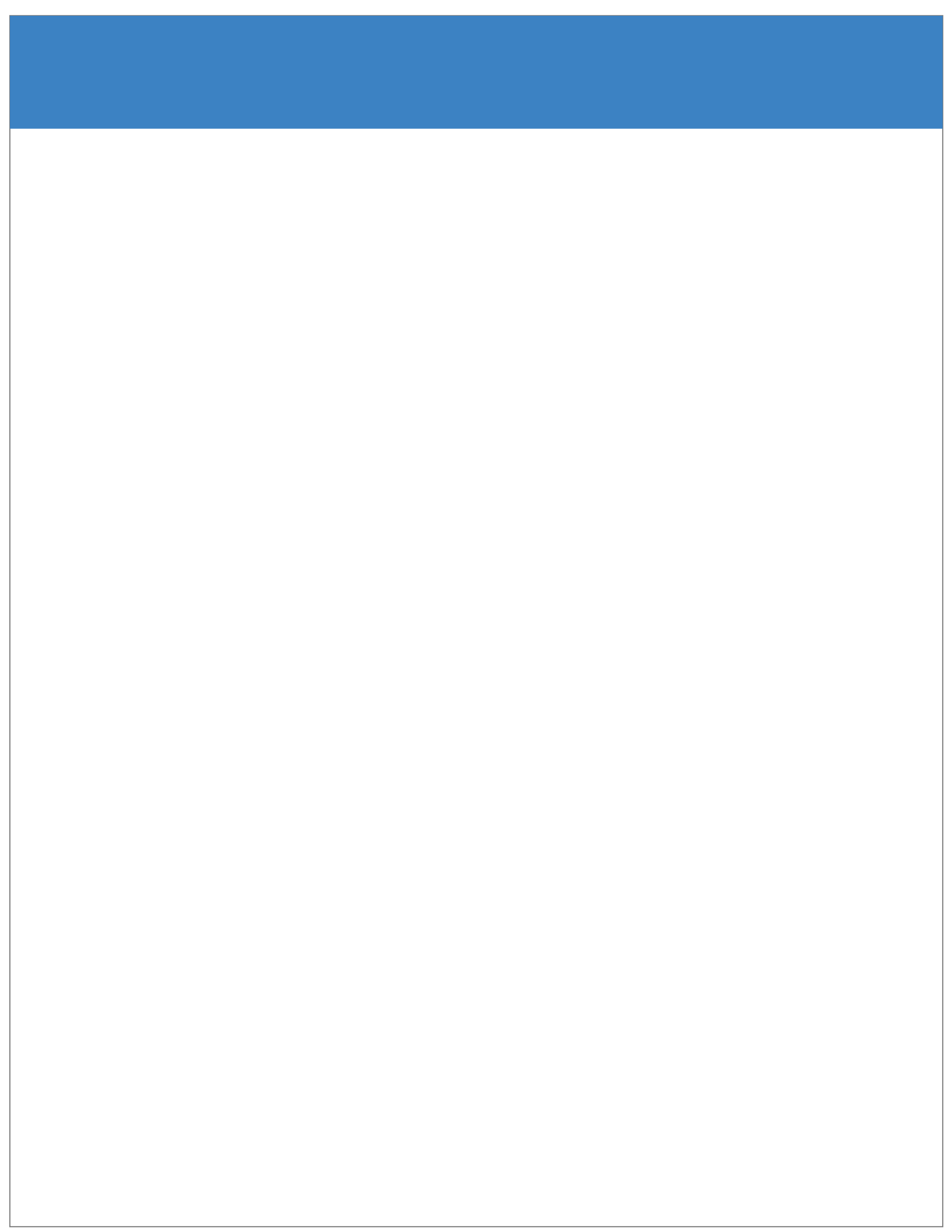
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**External Financial**  
**Reporting Decisions**



# Topic 1. Financial Statements

## Overview of Financial Statements and the Income Statement



**After studying this lesson, you should be able to:**

- Identify users of the balance sheet, income statement, statement of changes in equity, and the statement of cash flows and their needs (1.A.1.a).
- Demonstrate an understanding of the purposes and uses of each statement (1.A.1.b).
- Identify the limitations of each financial statement (1.A.1.d).
- Identify how various financial transactions affect the elements of each of the financial statements and determine the proper classification of the transaction (1.A.1.e).
- Identify the major components and classifications of [the income] statement (1.A.1.c).
- Demonstrate an understanding of how [an income statement] is prepared (1.A.1.g).
- Demonstrate an understanding of expense recognition practices (1.A.2.cc).
- Define gains and losses, and indicate the proper financial statement presentation for gains and losses (1.A.2.aa).
- Identify the correct treatment of discontinued operations (1.A.2.ee).
- Define and calculate comprehensive income (1.A.2.dd).



Financial statements are used by a variety of stakeholders both inside and outside an organization to determine the results of operations and financial position of the organization. Financial statements do have some inherent limitations, which are discussed in this lesson. There are four main financial statements used by stakeholders: income statement, statement of changes in equity, balance sheet, and cash flow statement. This lesson will discuss the income statement, including other comprehensive income. The other three financial statements will be covered in subsequent lessons.

I. A variety of users, or stakeholders, depend on financial statements to determine the results of operations and financial position of organizations. These may be parties within the organization or outside of the organization.

A. Internal users:

1. Managers use financial statements to determine whether the organization is utilizing resources in the most cost-effective manner and to make key investment and financing decisions.
2. Employees analyze financial statements for their own job security and to determine the impact of profit-based compensation.

B. External users:

1. Shareholders and prospective investors use financial statements to determine whether they can receive an appropriate return on investment.
2. Financial institutions assess the ability of organizations to comply with debt covenants and to repay loans or other debt through financial statement analysis.
3. Suppliers use financial statements to assess the ability of their customers to pay bills on time.
4. Customers use financial statements to assess whether their suppliers will remain in business to provide an ongoing supply of goods and services.
5. Competitors compare their performance to others in their industry or area using financial statements.
6. Regulators review financial statements to assess whether public organizations have adhered to statutory reporting requirements and to determine if additional rules are necessary for other stakeholders to be fully informed.

II. While the financial statements are useful for a variety of purposes noted above, they contain some inherent limitations. Some of these items require additional disclosure in the notes to the financial statements to enable stakeholders to make fully informed decisions.

A. *Periodicity*: Monthly, quarterly, and annual reporting periods are generally not good indicators of the natural business cycle. Users should be aware of this issue as it relates to the specific organization in order to properly interpret the financial statements.

B. *Historical information*: Because the financial statements are issued several weeks after the close of a fiscal period, the information contained therein is purely historical in nature and may not be directly relevant to ongoing operations. Organizations generally present two to three years of financial information together to enable users to better project future results using trend analysis. Still, the historical nature of the information presented must be considered together with any additional information known about the current status of the organization in order to maximize usefulness of the financial statements.

C. *Valuation*: A variety of measures are used for financial statement elements. Organizations are required to disclose their policies for significant accounting estimates and measurements in the notes to the financial statements.

1. *Historical cost*: Some non-monetary accounts use historical cost because it is objectively measured, but it is less relevant as time passes (i.e., Inventory, Property and Equipment).

2. *Estimates*: Some accounts are based on management estimates and judgments. These estimates introduce an element of uncertainty in the financial information (i.e., Warranty Reserves, Allowance for Doubtful Accounts).

3. *Fair value*: Accounts with objective market prices are often recorded at market value (i.e., Marketable Securities, Bonds).

D. *Accounting Methods*: Organizations often have a choice in accounting methods for various accounts and transactions. These choices may create difficulty when comparing the results of two different organizations (i.e., depreciation methods, inventory cost flow assumptions). Organizations are required to disclose their significant accounting policy choices in the notes to the financial statements.

E. *Omissions*: Several relevant items are omitted from the financial statements. For example, organizations are not permitted to include the value of their workforce, customer base, or internally developed intangibles, such as reputation, in the assets on the balance sheet. In addition, certain non-cash investing and financing transactions are omitted from the cash flow statement. For example, a purchase of a building through the issuance of stock would not appear on the cash flow statement but would be included in the notes to the financial statements.

- III. Organizations use four main financial statements to communicate financial information to stakeholders.
- A. The income statement shows the organization's sources of revenues, gains, expenses, and losses for the period presented that result in the net income or loss for that period.
1. Revenues and expenses generally result from the primary operations of the organization.
  2. Gains and losses result from peripheral activities of the organization.
  3. Elements on the income statement are recorded on an accrual basis. Revenues are recorded when control of the good or service passes to the customer, and expenses are recorded when incurred, regardless of when cash or other consideration is exchanged.
  4. The income statement is often combined with a presentation of Other Comprehensive Income items. These items are not considered part of net income but represent additional changes to the organization's economic position during the period presented. When Other Comprehensive Income information is included, the financial statement is called the Combined Statement of Income and Comprehensive Income. Alternatively, the Income Statement and the Statement of Comprehensive Income can be shown as two separate statements. If this is done, the first line of the Statement of Comprehensive Income is Net Income carried over from the Income Statement.
- B. The Statement of Changes in Equity presents the organization's detailed changes in each equity account over the course of the period presented. The accounts typically presented in the statement of changes in equity include the following:
1. *Preferred Stock*: Contributed capital for non-voting stock, which generally carries a stated dividend rate that will be paid first in the event the organization declares a dividend.
  2. *Common Stock* (at par value, if applicable): Contributed capital for voting stock with no specified return, whether through growth or through dividends.
  3. *Additional Paid-In Capital*: Contributed capital in excess of par values.
  4. *Treasury Stock*: A contra equity account for recording stock repurchased by the organization.
  5. *Retained Earnings*: Accumulated net income earned by the organization from inception less any dividends declared during that same time.
  6. *Accumulated Other Comprehensive Income*: Accumulated other comprehensive income items not included in the calculation of net income.
- C. The balance sheet shows the organization's classification of assets, liabilities, and owners' equity as of the end of the period presented.
1. Assets represent the resources available to the organization for carrying out its purpose, such as cash, accounts receivable, inventory, or property and equipment.
  2. Liabilities represent third-party claims to the assets of the organization. Liabilities are the amounts owed by the organization to third parties, such as debt, accounts payable, or wages payable.
  3. Equities represent owner claims to the assets of the organization. Equity can arise through contributions from owners (i.e., common stock), through non-owner economic changes related to other comprehensive income (i.e., accumulated other comprehensive income), or through the operations of the organization (i.e., retained earnings).
- D. The Statement of Cash Flows explains the overall change to the organization's cash position over the course of the period presented. This change is broken down into three categories of cash flows, the combination of which equals the total change in cash for the period presented:
1. *Operating Cash Flow*: The cash flows from the central operations of the organization. Generally, this would include cash inflows from customers, cash outflows to employees and suppliers, and cash flows for interest and taxes.

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2. *Investing Cash Flow*: The cash flows associated with longer-term investing activities of the organization. Generally, this would include cash outflows for purchases of property and equipment and other investments and cash inflows from the sale of these same items.
3. *Financing Cash Flow*: The cash flows associated with the financing strategy of the company. Generally, this would include cash inflows from borrowings (bank or bond), cash inflows from the sale of stock (common or preferred), cash outflows from the principal repayments on debt, cash outflows from purchasing treasury stock, and cash payment of dividends to owners.

IV. The income statement may be presented using one of two methods.

- A. The single-step method shows the organization's total revenues and gains compared to total expenses and losses. Net income is simply the difference between these two amounts.
- B. Illustration of single-step income statement: ABC Co. has the following revenues, expenses, gains, and losses in 20X2:

Sales Revenue	\$3,000,000
Dividend Revenue	20,000
Gain on Sale of Equipment	40,000
Cost of Goods Sold	1,900,000
Wage Expense	380,000
Administrative Expenses	360,000
Interest Expense	20,000
Income Tax Expense	150,000
Loss on Sale of Securities	10,000

The following income statement presents ABC's results of operations for 20X2 using the single-step method:

<b>ABC Co.</b>		
<b>Income Statement</b>		
<i>For the year ended December 31, 20X2</i>		
Sales Revenue	\$3,000,000	
Dividend Revenue	20,000	
Gain on Sale of Equipment	40,000	
Total Revenues and Gains		\$3,060,000
Cost of Goods Sold	1,900,000	
Wage Expense	380,000	
Administrative Expenses	360,000	
Interest Expense	20,000	
Loss on Sale of Securities	10,000	
Income Tax Expense	150,000	
Total Expenses and Losses		2,820,000
Net Income		<u>\$ 240,000</u>

- C. A multi-step income statement shows how an organization’s revenue, gains, expenses, and losses are split into operating and non-operating activities. This type of income statement provides a more detailed look at how an organization’s primary business operations are performing compared to peripheral activities.
- D. Illustration of multi-step income statement: Using the same information for ABC Co. above, the following income statement presents ABC’s results of operations for 20X2 using the multiple-step method:

<b>ABC Co.</b>		
<b>Income Statement</b>		
<i>For the year ended December 31, 20X2</i>		
Sales Revenue	\$3,000,000	
Cost of Goods Sold	1,900,000	
Gross Profit		\$1,100,000
Wage Expense	380,000	
Administrative Expenses	360,000	
Operating Expenses		740,000
Operating Income		360,000
Dividend Revenue	20,000	
Gain on Sale of Equipment	40,000	
Other Revenues and Gains		60,000
Interest Expense	20,000	
Loss on Sale of Securities	10,000	
Other Expenses and Losses		30,000
Income Before Tax		390,000
Income Tax Expense		150,000
Net Income		<u>\$ 240,000</u>

- E. Earnings per common share are required to be shown on the face of the income statement for public companies.
- V. Discontinued operations are shown separately after the results from continuing operations in the income statement.
  - A. Discontinued operations result when an organization disposes of a component of a business and those operations and cash flows are clearly distinguishable from other operations of the organization.
  - B. Gains or losses from discontinued operations are reported net of their tax impact.
  - C. If a public company has discontinued operations, earnings per common share are required to be shown for income from continuing operations, discontinued operations, and net income.



**Practice Question**

LMNO Company is a well-diversified company. It decides to discontinue the paint-producing division of the company. During year 20X5, the paint-producing division lost \$150,000 (net of tax). At the end of the year, LMNO sold the paint-producing division for a loss of \$60,000 (net of tax). Aside from the paint-producing division, LMNO had the following additional activity during year 20X5.

Sales Revenue	\$7,000,000
Dividend Revenue	35,000
Gain on Sale of Equipment	5,000
Cost of Goods Sold	3,200,000
Wage Expense	960,000
Administrative Expenses	770,000
Interest Expense	65,000
Income Tax Expense for Continuing Operations	807,200
Loss on Sale of Securities	27,000

Produce a multi-step income statement in good form.

**Answer**

<b>LMNO Co.</b>		
<b>Income Statement</b>		
<i>For the year ended December 31, 20X5</i>		
Sales Revenue	\$7,000,000	
Cost of Goods Sold	3,200,000	
Gross Profit		\$3,800,000
Wage Expense	960,000	
Administrative Expenses	770,000	
Operating Expenses		1,730,000
Operating Income		2,070,000
Dividend Revenue	35,000	
Gain on Sale of Equipment	5,000	
Other Revenues and Gains		40,000
Interest Expense	65,000	
Loss on Sale of Securities	27,000	
Other Expense and Losses		92,000
Income Before Tax		\$2,018,000
Income Tax Expense		807,200
Income from Continuing Operations		1,210,800
Discontinued Operations		
Loss from discontinued paint-producing division (net of tax)	150,000	
Loss from disposal of paint-producing division (net of tax)	60,000	
		210,000
Net Income		<u>\$1,000,800</u>

VI. Other Comprehensive Income (OCI) is made up of economic gains and losses that are not defined as part of net income.

A. Common components of OCI include the following:

1. Unrealized holding gains and losses on available-for-sale (AFS) securities
2. Gains and losses on cash flow hedges
3. Increases and decreases in equity due to foreign currency translation adjustments arising from the translation of foreign subsidiaries into U.S. dollars
4. Certain gains and losses related to defined benefit pensions

B. OCI can be presented in one of two ways:

1. In a combined Statement of Income and Comprehensive Income, which begins with the individual components of the income statement presented first followed by the individual components of OCI and ending with total Comprehensive Income (Net Income plus OCI) for the period presented.
2. In a separate fifth financial statement titled Statement of Comprehensive Income, which begins with net income as the first line followed by the individual components of OCI and ending with total Comprehensive Income for the period presented.

C. OCI amounts are accumulated in equity through Accumulated Other Comprehensive Income (AOCI) in a manner similar to the way revenues, expenses, gains, losses, and dividends are accumulated in equity through Retained Earnings.

D. Illustration: Continuing the ABC Co. example from above, ABC has a \$5,000 (net of tax) unrealized holding loss on AFS securities during 20X2. ABC's combined Statement of Comprehensive Income would appear as follows:

<b>ABC Co</b> <b>Statement of Income and Comprehensive Income</b> <i>For the year ended December 31, 20X2</i>		
Sales Revenue	\$3,000,000	
Cost of Goods Sold	<u>1,900,000</u>	
Gross Profit		\$1,100,000
Wage Expense	380,000	
Administrative Expenses	<u>360,000</u>	
Operating Expenses		<u>740,000</u>
Operating Income		360,000
Dividend Revenue	20,000	
Gain on Sale of Equipment	<u>40,000</u>	
Other Revenues and Gains		60,000
Interest Expense	20,000	
Loss on Sale of Securities	10,000	
Other Expenses and Losses		<u>30,000</u>
Income Before Tax		390,000
Income Tax Expense		<u>150,000</u>
Net Income		240,000
Unrealized Holding Loss (net of tax)		<u>5,000</u>
Comprehensive Income		<u><u>\$ 235,000</u></u>



**Practice Question**

Gregory Corporation uses a multi-step format on a combined Statement of Income and Comprehensive Income to report its results of operations each year. During 20X3, Gregory Corporation reported the following selected information on that statement:

Comprehensive Income	\$ 64,000
Gross Profit	382,000
Operating Expenses	261,000
Sales Revenue	596,000
Net Income	60,000
Income Before Tax	100,000

What are the total amounts Gregory Corporation reported for Cost of Goods Sold, Other Losses, Income Tax Expense, and Other Comprehensive Income (net of tax) in 20X3?

**Answer**

Amounts can be derived by re-creating a combined Statement of Income and Comprehensive Income for Gregory Corporation and deriving the required amounts from those given in the problem data.

<b>Gregory Corporation</b>	
<b>Statement of Income and Comprehensive Income</b>	
<i>For the year ended December 31, 20X3</i>	
Sales Revenue	\$596,000
Cost of Goods Sold	?
Gross Profit	<u>382,000</u>
Operating Expenses	<u>261,000</u>
Operating Income	
Other Losses	?
Income Before Tax	<u>100,000</u>
Income Tax Expense	?
Net Income	<u>60,000</u>
Other Comprehensive Income (net of tax)	?
Comprehensive Income	<u><u>\$ 64,000</u></u>

- Cost of Goods Sold = Sales Revenue less Gross Profit (\$596,000 – \$382,000) or \$214,000
- Other Losses = difference between Income Before Tax and Operating Income. Operating Income of \$121,000 can be derived from the given information (\$382,000 – \$261,000), so Other Losses is \$21,000 (\$100,000 – \$121,000)
- Income Tax Expense = Income Before Tax less Net Income (\$100,000 – \$60,000) or \$40,000
- Other Comprehensive Income (net of tax) = Comprehensive Income less Net Income (\$64,000 – \$60,000) or \$4,000

**Gregory Corporation**  
**Statement of Income and Comprehensive Income**

*For the year ended December 31, 20X3*

Sales Revenue	\$596,000
Cost of Goods Sold	<u>214,000</u>
Gross Profit	382,000
Operating Expenses	<u>261,000</u>
Operating Income	121,000
Other Losses	<u>21,000</u>
Income Before Tax	100,000
Income Tax Expense	<u>40,000</u>
Net Income	60,000
Other Comprehensive Income (net of tax)	<u>4,000</u>
Comprehensive Income	<u><u>\$ 64,000</u></u>



### Summary

Stakeholders both inside and outside an organization use financial statements to better understand the financial position and health of an organization. Financial statements have inherent limitations, some of which are addressed in the notes to the financial statements. It is important to understand other inherent limitations as well. The first financial statement is the income statement and can be presented using a single-step method or multi-step method. Both methods for preparing the income statement should be understood. Additionally, you should understand other comprehensive income, which is made up of economic gains and losses that are not defined as part of net income. The other three financial statements and additional considerations related to consolidated financial statements will be discussed in subsequent lessons

## The Statement of Changes in Equity and the Balance Sheet



### After studying this lesson, you should be able to:

- Identify the major components and classifications of [the statement of changes in equity] (1.A.1.c).
- Demonstrate an understanding of how [a statement of changes in equity] is prepared (1.A.1.g).
- Identify transactions that affect paid-in capital and those that affect retained earnings (1.A.2.v).
- Determine the effect on shareholders' equity of large and small stock dividends, and stock splits (1.A.2.w).
- Identify the major components and classifications of [the balance sheet] (1.A.1.c).
- Demonstrate an understanding of how [a balance sheet] is prepared (1.A.1.g).



The previous lesson gave an introduction to the financial statements as well as discussed the income statement in greater depth. This lesson will focus on the next two financial statements: the statement of changes in equity and the balance sheet.

- I. The statement of changes in equity presents the organization's detailed changes in each equity account over the course of the period presented. The accounts typically presented in the statement of changes in equity include the following:
  - A. Preferred Stock: Contributed capital for non-voting stock which generally carries a stated dividend rate that will be paid first in the event the organization declares a dividend.
    1. Generally non-voting stock ownership.
    2. Generally carries a specified dividend rate stated as a percentage of par value. For example, a \$100 par 8% preferred share would be entitled to an \$8 dividend annually if the organization declared dividends. Preferred Stock dividends must be paid before any common shareholders receive dividends from the organization.
    3. May be convertible into common stock at a specified conversion ratio.
    4. May be callable at a specified price at the option of the organization.
    5. Behind company creditors, but ahead of common shareholders for preference in the case of bankruptcy or other liquidation of the organization.
  - B. Common Stock
    1. Usually carried at par value unless the stock is "no par" stock, in which case the entire amount paid for the stock is classified as common stock.
    2. Dividends are not predetermined like preferred stock and are only paid when declared and only then, after the preferred shareholders receive their stated dividend.
    3. Last in line for preference in the case of bankruptcy or other liquidation.
  - C. Additional Paid-In Capital
    1. Amount received by the organization for stock over the par value of the shares.

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2. Can be affected by various equity transactions, including stock dividends, resales of treasury stock, and issuance of options and warrants.

### D. Treasury Stock

1. Amount paid by the organization to repurchase its own stock
2. Shown as contra equity, or a reduction to the equity section

### E. Retained Earnings

1. Net income or loss for the organization is ultimately recorded in retained earnings.
2. Dividends declared are a reduction to retained earnings.

### F. Accumulated Other Comprehensive Income

1. Other comprehensive income or loss for the organization is ultimately recorded in Accumulated Other Comprehensive Income.
2. Items accumulated here are not part of the calculation of net income.

### G. Non-Controlling Interest

1. When an organization has a controlling interest in another entity, but not complete ownership, 100% of the assets and liabilities of the subsidiary are included in the balance sheet of the organization and the portion of the subsidiary that is owned by third parties is segregated as a separate component of equity.

## II. Several common transactions affect the equity accounts.

A. Sale of new shares: Generally sold for an amount above par value. Cash received is recorded and the common stock/preferred stock account is increased for the par value and the additional paid-in capital account is increased for the balance.

B. Issuance of options: Usually issued as a form of compensation and recorded as part of additional paid-in capital as compensation expense is recognized.

1. Total compensation expense is valued at the fair value of the options on the date they are granted.
2. Compensation expense is recognized over the service period required for the employee to become vested in the options.

C. Dividends: Retained earnings is reduced when a cash dividend is declared. If payment of the dividend is delayed, a payable is also recorded and then reduced when the payment is later made.

D. Net Income/Loss: Increases/Decreases retained earnings each year.

E. Other Comprehensive Income Items: Increase/Decrease accumulated other comprehensive income each year.

F. Repurchase of treasury stock: Treasury stock is increased (which is a reduction to equity) for the cost of the treasury shares.

G. Resale of treasury stock.

1. When sold for an amount in excess of the repurchase price, the cost is taken out of treasury stock and the excess is added to additional paid-in capital.
2. When sold for an amount below the repurchase price, the cost is taken out of treasury stock and the difference is taken from additional paid-in capital to the extent it was previously increased for treasury stock transactions. If no additional paid-in capital from treasury stock transactions exists, the difference is taken from retained earnings.

- H. Stock split: Generally has no impact on any of the equity accounts as long as the par value is also changed to reflect the new share size. For example, if 100 shares of \$1 par common stock undergo a 2-for-1 stock split, the result would be 200 shares of \$0.50 par common stock. Common stock is \$100 before the split (100 x \$1) and is still \$100 after the split (200 x \$0.50) so no journal entry is needed.
- I. Stock dividends: A stock dividend occurs when an organization distributes additional shares of stock to existing stockholders as a dividend rather than paying them cash.
  1. Small stock dividend: Less than 20–25% of the number of shares outstanding. Retained earnings is reduced for the fair value of the stock being issued, common stock is increased for the par value of the stock issued, and the difference is included in additional paid-in capital.
  2. Large stock dividend: Greater than 20–25% of the number of shares outstanding. Retained earnings is reduced for the par value of the stock being issued and common stock is increased for the same amount. No impact on additional paid-in capital, similar to a stock split.



**Practice Question**

Jolley, Inc. has 100,000 common shares outstanding with a \$1 par value and a market value of \$8. Jolley declares a 22% stock dividend.

What is the impact on the various equity accounts if the transaction is considered a small stock dividend?

What is the impact on the various equity accounts if the transaction is considered a large stock dividend?

**Answer**

1. A small stock dividend is recorded at fair value. 22,000 new shares are issued (100,000 × 22%) and the fair value of \$176,000 is taken from retained earnings (22,000 × \$8), common stock is increased by \$22,000 (22,000 × \$1) to reflect the par value of the new shares and the balance of \$154,000 (\$176,000 – \$22,000) is recorded as an increase to additional paid-in capital.
2. A large stock dividend is recorded at par value. 22,000 new shares are issued (100,000 × 22%) and the par value of \$22,000 is taken from retained earnings (22,000 × \$1) and common stock is increased for the same amount.

III. Illustration: The basic format for the statement of changes in equity is illustrated using ABC Co. information for 20X2.

<b>ABC Co.</b>						
<b>Statement of Changes in Equity</b>						
<i>For the year ended December 31, 20X2</i>						
	<b>Common Stock</b>	<b>APIC</b>	<b>Treasury Stock</b>	<b>Retained Earnings</b>	<b>AOCI</b>	<b>Total Equity</b>
December 31, 20X1	\$100,000	\$220,000	\$(10,000)	\$210,000	\$7,000	\$527,000
Purchase of Treasury Stock			(5,000)			(5,000)
Issuance of New Common Shares	10,000	35,000				45,000
Net Income				240,000		240,000
Other Comprehensive Income					(5,000)	(5,000)
December 31, 20X2	<u>\$110,000</u>	<u>\$255,000</u>	<u>\$(15,000)</u>	<u>\$450,000</u>	<u>\$2,000</u>	<u>\$802,000</u>

- IV. The balance sheet shows the organization's assets, liabilities, and owners' equity as of the end of the period presented. The balance sheet is the only one of the four main financial statements that presents information as of a point in time, rather than over a period of time. The classic accounting equation "assets = liabilities + equity" is illustrated through the balance sheet.
- A. Assets represent the resources available to the organization for carrying out its purpose. Assets are presented in order of liquidity within two general categories, current or non-current, based upon the period of time the assets are expected to convert to cash.
1. Cash, accounts receivable, inventory, prepaid assets, and other items expected to be realized within one year (or the operating cycle if longer) are classified as current.
  2. Property and equipment, intangible assets, and other assets expected to benefit the company for longer than one year (or the operating cycle if longer) are classified as non-current.
- B. Liabilities represent third party claims to the assets of the organization. Liabilities are the amounts owed by the organization to third parties, such as debt, accounts payable, or wages payable. Liabilities are presented in the order they come due within two general categories, current or non-current, based upon the period of time before assets or other resources of the company will be utilized to satisfy the liability.
1. Accounts payable, accrued expenses (wages, utilities, rent, etc.), deferred revenue, principal portions of long-term debt due in the coming year, and other liabilities expected to be settled with cash or other current assets within one year (or the operating cycle if longer) are classified as current.
  2. Liabilities due after one year (or the operating cycle if longer), such as bonds or bank debt, are classified as long-term. In addition, deferred tax liabilities are considered long-term liabilities by definition.
- C. Equities represent owner claims to the assets of the organization. These accounts were explained in part I of this lesson.
1. Equity accounts are generally presented in order of liquidation preference with preferred stock first, followed by common stock and additional paid-in capital. Retained earnings and accumulated other comprehensive income are generally presented last in the equity section.
- D. The balance sheet is incomplete without the additional disclosures in the notes to the financial statements. These disclosures help investors understand the key assumptions and methods of accounting used so they can more effectively compare prior periods and assist with comparisons with other companies. Key disclosures include the following items.
1. Significant accounting policies, including the following:
    - a. Any securities classified as cash equivalents
    - b. Inventory valuation method and cost flow assumptions
    - c. Method of depreciation
  2. Significant estimates made within the accounts
  3. Amounts within major classes of inventory (i.e., raw materials, work in process, finished goods)
  4. Gross amounts within major classes of property and equipment (i.e. furniture, equipment, buildings, land) and accumulated depreciation for each
  5. Components of deferred tax assets and liabilities
  6. Expected annual principal payments on debt for the next five years and all amounts due thereafter
  7. Sinking fund provisions for bonds
  8. Par values and contractual provisions for preferred stock and common stock

- 9. Details about employee stock compensation programs
- 10. Significant commitments or contingencies not recorded in the balance sheet
- 11. Other information as may be needed for a full understanding of the items reported in the balance sheet

V. Illustration: The basic format for the balance sheet is illustrated using ABC Co. information for 20X2.

<b>ABC Co.</b>		
<b>Balance Sheet</b>		
<i>As of December 31, 20X1 end 20X2</i>		
	<b>20X1</b>	<b>20X2</b>
Cash	\$ 30,000	\$ 100,000
Accounts Receivable	155,000	225,000
Inventory	200,000	450,000
AFS Investments	90,000	67,000
Property and Equipment	480,000	450,000
<b>Total Assets</b>	<b>\$955,000</b>	<b>\$1,292,000</b>
Accounts Payable	\$213,000	\$ 270,000
Accrued Wages	15,000	20,000
Long-Term Debt	200,000	200,000
<b>Total Liabilities</b>	<b>428,000</b>	<b>490,000</b>
Common Stock	100,000	110,000
Additional Paid-In Capital	220,000	255,000
Treasury Stock	(10,000)	(15,000)
Retained Earnings	210,000	450,000
Accumulated Other		
Comprehensive Income	7,000	2,000
<b>Total Equity</b>	<b>527,000</b>	<b>802,000</b>
<b>Total Liabilities and Equity</b>	<b>\$955,000</b>	<b>\$1,292,000</b>



### Practice Question

Jolley, Inc. is preparing its 20X1 balance sheet and needs some assistance with properly classifying some of its liabilities. Jolley's operating cycle is approximately 90 to 120 days. Identify whether the following items should be current or non-current on the balance sheet.

1. Debt of \$10,000 payable over 5 years at a rate of \$2,000 per year plus interest.
2. Bonds of \$100,000 due in full in 15 years. Interest of \$6,000 is payable on the bonds each year and the full amount of the interest was already recorded and paid for 20X1. Accordingly, no interest payable was recorded at the end of the year.
3. Deferred Tax Liability of \$3,000 expected to reverse entirely within the next year.
4. Accrued Warranty of \$12,000 expected to be paid out evenly over the next three years.
5. Accounts Payable of \$38,000 generally due between 30 and 90 days.

### Answer

1. Because \$2,000 is due in the coming year and the remainder is due thereafter, this debt should be classified as current for \$2,000 and non-current for \$8,000.
2. Because the principal portion of the bonds is not due for 15 years, the entire amount should be classified as non-current. Jolley has fully paid its interest for the year, so they have no need for a payable associated with the interest. Classification of the interest is not relevant.
3. By definition, Deferred Tax Liabilities are non-current liabilities.
4. The accrued warranty should be split as current and non-current based on the expected payments related to the warranty. \$4,000 would be current and \$8,000 would be non-current.
5. Because the amount is expected to be paid within the next year, the entire amount is current.



### Summary

The statement of changes in equity presents the organization's detailed changes in each equity account over the course of the period presented. The accounts typically presented in this financial statement include: preferred stock, common stock, additional paid-in capital, treasury stock, retained earnings, accumulated other comprehensive income, and non-controlling interest. You should be familiar with the common transactions that affect equity accounts. The balance sheet shows the organization's assets, liabilities, and owner's equity as of the end of the period presented. Assets represent the resources available for carrying out the organization's purpose and can be current or non-current. Liabilities represent third-party claims to the organization's assets and are also represented as current or non-current. Equities represent owner claims to the organization's assets. It is also important to know the key disclosures related to the balance sheet.

## The Statement of Cash Flows and Financial Statement Articulation



**After studying this lesson, you should be able to:**

- Identify the major components and classifications of [the statement of cash flows] (1.A.1.c).
- Demonstrate an understanding of how [a statement of cash flows] is prepared (1.A.1.g).
- Demonstrate an understanding of the relationship among the financial statements (1.A.1.f).



The previous two lessons have addressed the income statement, statement of changes in equity, and balance sheet. The last financial statement is the statement of cash flows. This lesson will focus on the statement of cash flows as well as show how the four financial statements, when properly prepared, connect to each other through various accounts.

- I. The statement of cash flows reconciles the overall change to the organization's cash position over the course of the period presented. Because the other financial statements are prepared using accrual accounting, the statement of cash flows is useful for understanding cash resources and needs of the organization. On the cash flow statement, the change in cash is broken down into three categories of cash flows, the combination of which equal the total change in cash for the period presented:
  - A. Operating Cash Flow: The cash flows from the central operations of the organization. Generally, this would include cash inflows from customers, cash outflows to employees and suppliers, and cash flows for interest and taxes. Two methods are used to present the operating section of the cash flow statement, the indirect method and the direct method.
    1. Indirect method: This is the most common method used. It begins with net income, then reconciles to operating cash flow by adjusting from accrual accounting to cash basis accounting. Common adjustments to net income to arrive at operating cash flow are:
      - a. Add back non-cash expenses such as depreciation, amortization, and stock compensation.
      - b. Remove non-operating gains (subtract) and losses (add) such as gains and losses on investments or property and equipment.
      - c. Adjust for the changes in operating assets and liabilities such as accounts receivable, inventory, prepaid assets, accounts payable, accrued liabilities, interest payable, and taxes payable.
        - i. Increases in operating assets AND decreases in operating liabilities are subtracted.
        - ii. Decreases in operating assets AND increases in operating liabilities are added.
      - d. Illustration: The operating section of the 20X2 cash flow statement for ABC Co., prepared using the indirect method, is presented below:

Net Income		\$ 240,000
Adjustments for non-cash items:		
Gain on Sale of Equipment	\$ (40,000)	
Loss on Sale of Securities	10,000	
Depreciation Expense	50,000	
Adjustments for changes in balance sheet accounts:		
Increase in Accounts Receivable	(70,000)	
Increase in inventory	(250,000)	
Increase in Accounts Payable	57,000	
Increase in Wages Payable	5,000	
Total adjustments to Net Income		<u>(238,000)</u>
<b>Net Cash Inflow from Operating Activities</b>		<b>\$ 2,000</b>

2. Direct method: This method shows actual gross cash inflows from their sources derived (from customers, from interest) and gross cash outflow for each purpose (to suppliers, for wages, for interest, for taxes). The FASB has stated a preference for this method, but it is rarely used. If the direct method is used, the organization is also required to show the reconciliation of net income to cash flows from operations, effectively requiring both methods to be disclosed.

a. Illustration: The operating section of the 20X2 cash flow statement for ABC Co., prepared using the direct method, is presented below:

Cash received from customers	\$ 2,930,000
Cash paid to suppliers	(2,093,000)
Cash paid for wages	(375,000)
Cash paid for administrative expenses	(310,000)
Cash received from dividends	20,000
Cash paid for interest	(20,000)
Cash paid for taxes	<u>(150,000)</u>
<b>Net Cash Inflow from Operating Activities</b>	<b>\$ 2,000</b>

B. Investing Cash Flow: The cash flows associated with longer term investing activities of the organization. Generally, this would include cash outflows for purchases of property and equipment and other investments, and cash inflows from the sale of these same items.

1. The non-operating assets, usually long-term assets, of the organization should be analyzed to support the preparation of the investing section.

2. Illustration: The investing section of the 20X2 cash flow statement for ABC Co. is presented below:

Purchase of PPE	\$(60,000)
Sale of PPE	80,000
Purchase of AFS Securities	(32,000)
Sale of AFS Securities	<u>40,000</u>
<b>Net Cash Inflow from Investing Activities</b>	<b>\$ 28,000</b>

C. Financing Cash Flow: The cash flows associated with the financing strategy of the company. Generally, this would include cash inflows from borrowings (bank or bond), cash inflows from the sale of stock (common or preferred), cash outflows from the principal repayments on debt, cash outflows from purchasing treasury stock, and cash payment of dividends to owners.

1. The non-operating liabilities, usually long-term liabilities, and equity accounts of the organization should be analyzed to support the preparation of the financing section. The statement of changes in equity is particularly helpful in preparing part of this section as it relates to the equity accounts.
2. Illustration: The financing section of the 20X2 cash flow statement for ABC Co. is presented below:

Issuance of Common Shares	\$45,000
Repurchase of Treasury Stock	<u>(5,000)</u>
<b>Net Cash Inflow from Financing Activities</b>	<b>\$40,000</b>

D. Supplemental disclosures are required for the cash flow statement.

1. Cash paid for interest
2. Cash paid for taxes
3. Significant non-cash investing and financing transactions (e.g., the issuance of bonds for the purchase of a building)



### Practice Question

Classify each of the following items as either operating cash flow, investing cash flow, financing cash flow, or non-cash flow. If the item is non-cash, explain whether and how it would appear on the cash flow statement.

- a. Payments received from customers
- b. Loss on the sale of available-for-sale securities
- c. Interest payments received
- d. Cash received from the issuance of bonds
- e. Dividends paid to preferred shareholders
- f. Depreciation expense
- g. Cash received from the sale of property and equipment
- h. Cash payment on a mortgage loan (part interest and part principal)
- i. Issuance of stock to acquire another organization

### Answer

- a. Operating
- b. Non-cash: would be a reconciling item in the operating section of the statement of cash flows if the indirect method is used
- c. Operating
- d. Financing
- e. Financing
- f. Non-cash: would be a reconciling item in the operating section of the statement of cash flows if the indirect method is used
- g. Investing
- h. Part operating (interest), part financing (principal)
- i. Non-cash: would be disclosed as a significant non-cash financing (new stock) and investing (acquisition) activity

- I. The four main financial statements articulate, or connect, to each other through various accounts when properly prepared.
  - A. *Net income*<sup>1</sup> (and *other comprehensive income*<sup>2</sup>) from the income statement (or from the combined statement of income and comprehensive income) will appear in the statement of changes in equity.
  - B. The beginning and ending balances of each equity account on the statement of changes in equity will equal the balances in the equity accounts on the balance sheet from the previous year (*beginning equity balances*<sup>3</sup>) and the current year (*ending equity balances*<sup>4</sup>).
  - C. *Net income*<sup>1</sup> from the income statement will flow to the top line of the statement of cash flows when the indirect method (operating section) is used.
  - D. *Non cash gains and losses*<sup>5</sup> from the income statement will flow to the statement of cash flows when the indirect method (operating section) is used.
  - E. The *beginning cash balance*<sup>6</sup> and the *ending cash balance*<sup>7</sup> from the balance sheet will flow to the statement of cash flows.

- F. The *changes in the beginning and ending balances of operating assets*<sup>8</sup> and liabilities on the balance sheet will flow to the cash flow statements when the indirect method is used (operating section).
- G. Illustration: A full set of ABC Co. financial statements for the year ended 20X2 follow. Follow the superscripts in the explanation above as well as in the financial statements below to see an illustration of the articulation between the statements as outlined.

<b>ABC Co.</b>		
<b>Statement of Income and Comprehensive Income</b>		
<i>For the year ended December 31, 20X2</i>		
Sales Revenue	\$3,000,000	
Cost of Goods Sold	<u>1,900,000</u>	
Gross Profit		\$1,100,000
Wage Expense	380,000	
Administrative Expenses	<u>360,000</u>	
Operating Expenses		<u>740,000</u>
Operating Income		360,000
Dividend Revenue	20,000	
Gain on Sale of Equipment	<u>40,000<sup>5</sup></u>	
Other Revenues and Gains		60,000
Interest Expense	20,000	
Loss on Sale of Securities	10,000 <sup>5</sup>	
Other Expenses and Losses		<u>30,000</u>
Income Before Tax		390,000
Income Tax Expense		<u>150,000</u>
Net Income		240,000 <sup>1</sup>
Unrealized Holding Loss (net of tax)		<u>5,000<sup>2</sup></u>
Comprehensive Income		<u><u>\$ 235,000</u></u>

<b>ABC Co.</b>						
<b>Statement of Changes in Equity</b>						
<i>For the year ended December 31, 20X2</i>						
	<b>Common Stock</b>	<b>APIC</b>	<b>Treasury Stock</b>	<b>Retained Earnings</b>	<b>AOCI</b>	<b>Total Equity</b>
December 31, 20X1	\$100,000 <sup>3</sup>	\$220,000 <sup>3</sup>	\$(10,000) <sup>3</sup>	\$210,000 <sup>3</sup>	\$7,000 <sup>3</sup>	\$527,000 <sup>3</sup>
Purchase of Treasury Stock			(5,000)			(5,000)
Issuance of New Common Shares	10,000	35,000				45,000
Net Income				240,000 <sup>1</sup>		240,000
Other Comprehensive Income					(5,000) <sup>2</sup>	(5,000)
December 31, 20X2	<u><u>\$110,000<sup>4</sup></u></u>	<u><u>\$225,000<sup>4</sup></u></u>	<u><u>\$(15,000)<sup>4</sup></u></u>	<u><u>\$450,000<sup>4</sup></u></u>	<u><u>\$2,000<sup>4</sup></u></u>	<u><u>\$802,000<sup>4</sup></u></u>

<b>ABC Co.</b> <b>Balance Sheet</b> <i>As of December 31, 20X1 and 20X2</i>		
	<b>20X1</b>	<b>20X2</b>
Cash	\$ 30,000 <sup>6</sup>	\$ 100,000 <sup>7</sup>
Accounts Receivable	155,000 <sup>8</sup>	225,000 <sup>8</sup>
Inventory	200,000 <sup>8</sup>	450,000 <sup>8</sup>
AFS Investments	90,000	67,000
Property and Equipment	480,000	450,000
Total Assets	\$ 955,000	\$ 1,292,000
Accounts Payable	\$ 213,000 <sup>8</sup>	\$ 270,000 <sup>8</sup>
Accrued Wages	15,000 <sup>8</sup>	20,000 <sup>8</sup>
Long-Term Debt	200,000	200,000
Total Liabilities	428,000	490,000
Common Stock	100,000 <sup>3</sup>	110,000 <sup>4</sup>
Additional Paid-In Capital	220,000 <sup>3</sup>	255,000 <sup>4</sup>
Treasury Stock	(10,000) <sup>3</sup>	(15,000) <sup>4</sup>
Retained Earnings	210,000 <sup>3</sup>	450,000 <sup>4</sup>
Accumulated Other Comprehensive Income	7,000 <sup>3</sup>	2,000 <sup>4</sup>
Total Equity	527,000 <sup>3</sup>	802,000 <sup>4</sup>
Total Liabilities and Equity	\$ 955,000	\$ 1,292,000

<b>ABC Co.</b>		
<b>Statement of Cash Flows</b>		
<i>For the year ended December 31, 20X2</i>		
Net Income		\$240,000 <sup>1</sup>
Adjustment for non-cash items:		
Gain on Sale of Equipment	\$ (40,000) <sup>5</sup>	
Loss on Sale of Securities	10,000 <sup>5</sup>	
Depreciation Expense	50,000	
Adjustments for changes in balance sheet accounts:		
Increase in Accounts Receivable	(70,000) <sup>8</sup>	
Increase in Inventory	(250,000) <sup>8</sup>	
Increase in Accounts Payable	57,000 <sup>8</sup>	
Increase in Wages Payable	<u>5,000<sup>8</sup></u>	
Total adjustments to Net Income		<u>(238,000)</u>
Net Cash Inflow from Operating Activities		2,000
Investing Activities:		
Purchase of PPE	(60,000)	
Sale of PPE	80,000	
Purchase of AFS Securities	(32,000)	
Sale of AFS Securities	<u>40,000</u>	
Net Cash Inflow from Investing Activities		28,000
Financing Activities:		
Issuance of Common Shares	45,000	
Repurchase of Treasury stock	<u>(5,000)</u>	
Net Cash Inflow from Financing Activities		<u>40,000</u>
Increase in Cash		70,000
Beginning Cash Balance		30,000 <sup>6</sup>
Ending Cash Balance		<u><u>\$100,000<sup>7</sup></u></u>
Cash paid for interest	\$ 20,000	
Cash paid for taxes	\$150,000	



### Practice Question

List the financial statement(s) that would include the following amounts.

- a. Net Income
- b. Cash balance
- c. Increase in Accounts Receivable
- d. Equity account balances
- e. Gain on Sale of Equipment
- f. Other Comprehensive Income

### Answer

All of the major financial statements articulate with each other. Some items that are included on one financial statement are used in other places on other statements. If they are all prepared correctly, they will connect with each other. The items listed above would be included in the following financial statements:

- a. Income Statement  
Statement of Changes in Equity  
Statement of Cash Flows (when the indirect method is used for the operating section)
- b. Balance Sheet  
Statement of Cash Flows
- c. Statement of Cash Flows
- d. Balance Sheet  
Statement of Changes in Equity
- e. Income Statement  
Statement of Cash Flows
- f. Combined Statement of Income and Comprehensive Income OR  
Statement of Comprehensive Income  
Statement of Changes in Equity



### Summary

The statement of cash flows is useful for understanding cash resources and needs of the organization because it reconciles the overall changes to the organization's cash position over the course of the period presented. Cash flows are broken down into three categories: operating, investing, and financing. Operating cash flows are from the central operations of the organization and can be presented using the indirect method or the direct method. Investing cash flows are related to longer term investing activities. Financing cash flows are associated with the financing strategy of the organization. You should also be familiar with the accounts that connect the financial statements together.

## Integrated Reporting



### After studying this lesson, you should be able to:

- Define integrated reporting, integrated thinking, and the integrated report, and demonstrate an understanding of the relationship among them (1.A.1.l).
- Identify the primary purpose of integrated reporting (1.A.1.m).
- Explain the fundamental concepts of value creation, the six capitals, and the value creation process (1.A.1.n).
- Identify elements of an integrated report (i.e., organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, basis of preparation and presentation) (1.A.1.o).
- Identify and explain the benefits and challenges of adopting integrated reporting (1.A.1.p).



Integrated Reporting is a relatively new method of reflecting an organization's financial and nonfinancial information. This concept was developed in the United Kingdom and has slowly grown in popularity since a framework was published in 2013. The output of Integrated Reporting is an Integrated Report: a voluntary, non-audited view of an organization's value chain which is directed to stakeholders outside of the organization. This lesson will introduce Integrated Reports, including the fundamental concepts, the elements, and the benefits and challenges of Integrated Reports.

### I. Defining Integrated Reporting

- A. Integrated reporting is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. (Copyright © December 2013 by the International Integrated Reporting Council ("the IIRC"). All rights reserved. Used with permission of the IIRC. Contact the IIRC ([info@theiirc.org](mailto:info@theiirc.org)) for permission to reproduce, store, transmit or make other uses of this document.)
- B. The definition of integrated reporting is found in the "International IR Framework" published in 2013 by the International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, standard setters, and accounting professionals.
- C. The Integrated Reporting Council uses the symbol <IR> to abbreviate the name of this topic. The use of the less-than symbol and the greater-than symbol in the icon are noteworthy:
  1. The use of the less-than symbol is interesting because an integrated report should be concise, or short and "to the point." The <IR> Framework explains that the integrated report "Expresses concepts clearly and in as few words as possible." As such, an integrated report is "less than" an entire annual report or 10-K.
  2. That said, the integrated report encompasses six capitals: financial, manufactured, intellectual, human, social and relationship, and natural. As such, an integrated report is "greater than" a traditional financially oriented annual report because it has a much broader scope.
- D. To summarize, <IR> is both "less than" and "greater than" traditional financial reporting.

E. <IR> is a process or a series of activities that people inside an organization will perform. As such, the Framework is a methodology for this process.

1. The adoption of <IR> is also a process. An organization would typically start by exploring how to use <IR> by obtaining education and training and then perhaps piloting <IR> in a single division or with a single product line.
2. In this way, <IR> is like a systems development effort:
  - a. The words "integrated thinking" are used in the <IR> definition. In this context, "integrated thinking" is very similar to "cross-functional," meaning that people from different areas of an organization work together as a team.
  - b. The output of the <IR> process is an integrated report, produced or published on a periodic basis.
  - c. The main topic, or focus, of an integrated report is value creation. Value creation is considered at a very high level:
    - i. The process that results in increases, decreases, or transformations of the capitals caused by the organization's business activities and outputs. In short, value creation is the sum of the organization's activities which, in theory, aims to increase the overall stock of capitals.
    - ii. For example, an organization's financial capital is increased when it makes a profit, and the quality of its human capital is improved when employees become better trained.

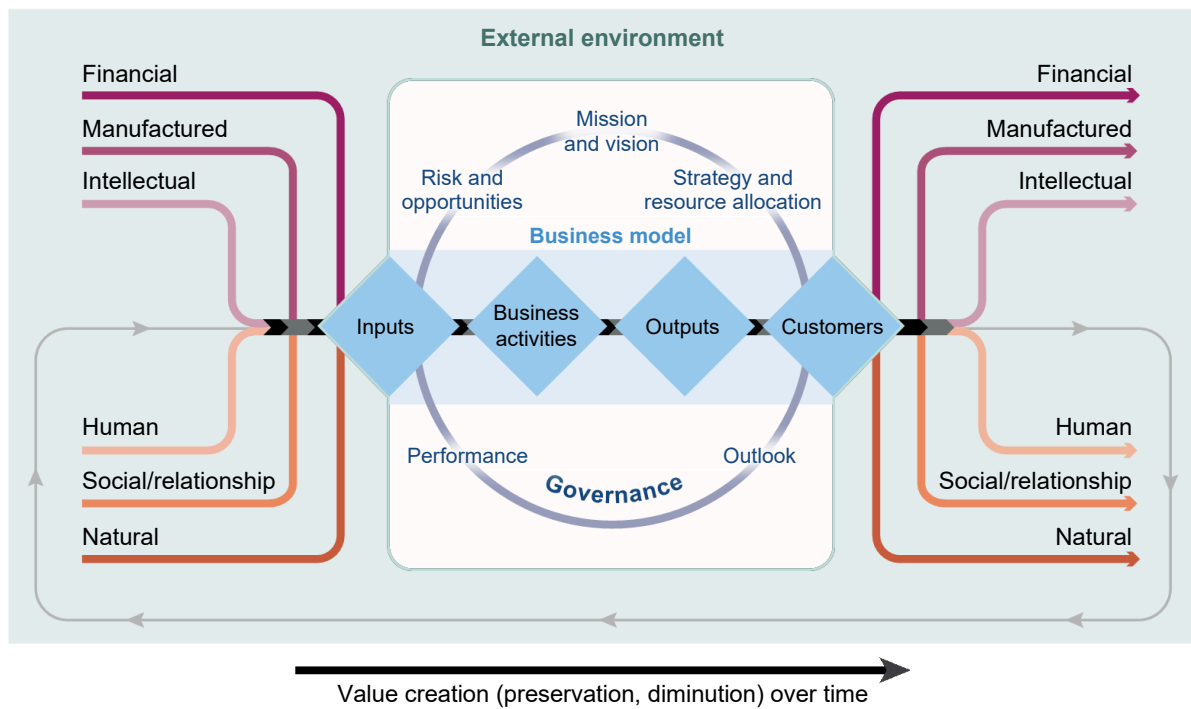
## II. Why You Haven't Heard of Integrated Reporting

- A. Integrated reporting is a relatively new term or label to describe advanced performance reporting. The <IR> Framework was developed in the United Kingdom and was published in 2013.
- B. This topic was likely not covered in the Managerial Accounting textbook(s) you used in college. Even if the textbook included this topic, it was likely discussed in one of the later chapters of the book, which not all Accounting professors have time to teach.
- C. This topic will appear on the CMA Exam for the first time in 2020 and has been grouped with External Financial Reporting Decisions, which encompasses about 15% of the CMA exam Part 1.
- D. Other forms of "Advanced Performance Reporting" have been developed and discussed over the past 25 years; these forms are Cost of Quality, Triple Bottom-Line Reporting, and Sustainability Reporting. Common elements to all these "flavors" of reporting include:
  1. They are not required.
  2. They are not audited by professional accountants.
  3. They involve participation and cooperation of nonfinancial members of the organization.
  4. They measure data far beyond financial metrics.

## III. Value Creation and the Six Capitals

- A. Value creation is the process that results in increases, decreases, or transformations of the capitals caused by the organization's business activities and outputs.
- B. An organization creates value for:
  1. The organization itself, which enables financial returns to the providers of financial capital
  2. Others outside of the organization (i.e., stakeholders and society at large)

C. The <IR> Framework includes a diagram that illustrates the value creation process:



Source: *Integrated Reporting. (2021). International <IR> Framework.*

1. The diagram begins on the left-hand side with the six capitals. The six capitals come together in the center of the diagram into the organization's business model. The business model takes inputs, performs business activities, generates outputs, and creates outcomes. The right-hand side of the diagram again illustrates the six capitals, but now the colorization, or shading, of each capital is darker or bolder, to reflect improvement or enhancement.

The six capitals which are central to <IR> are the following:

- Financial
- Intellectual
- Social and relationship
- Human
- Manufactured
- Natural

- a. Financial capital is the pool of funds that has the following characteristics:
  - i. It is available to an organization for use in the production of goods or the provision of services.
  - ii. It is obtained through financing, such as debt, equity, or grants, or generated through operations or investments.
- b. Intellectual capital is organizational, knowledge-based intangibles, including:
  - i. Intellectual property, such as patents, copyrights, software, rights, and licenses
  - ii. Organizational capital such as tacit knowledge, systems, procedures, and protocols

- c. Social and relationship capital includes:
  - i. Shared norms, common values, and behaviors
  - ii. Key stakeholder relationships
- d. Human capital is people's competencies, capabilities, and experience, and their motivations to innovate.
- e. Manufactured capital is defined as manufactured physical objects (as distinct from natural physical objects) that are available to an organization for use in the production of goods or the provision of services, including:
  - i. Buildings
  - ii. Equipment
  - iii. Infrastructure (such as roads, ports, bridges, and waste and water treatment plants)
  - iv. Inventory
  - v. Tools, patterns, and molds that a company would make and use in its production process
- f. Natural capital is defined as all renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current, or future prosperity of an organization. It includes the following:
  - i. Air, water, land, minerals, and forests
  - ii. Biodiversity and ecosystem health

A tool to help remember the six capitals is the mnemonic FISHMAN:

**F**inancial

**I**ntellectual

**S**ocial and relationship

**H**uman

**M**anufactured

**a**nd

**N**atural

#### IV. The Integrated Report

- A. An integrated report is a concise communication about how an organization's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value over the short, medium, and long term.
- B. An integrated report includes eight Content Elements, which answer the question posed below for each.

- 1. Organizational overview and external environment:

*What does the organization do and what are the circumstances under which it operates?*

- 2. Governance:

*How does the organization's governance structure support its ability to create value in the short, medium, and long term?*

- 3. Business model:

*What is the organization's business model?*

## 4. Risks and opportunities:

*What are the specific risks and opportunities that affect the organization's ability to create value over the short, medium, and long term, and how is the organization dealing with them?*

## 5. Strategy and resource allocation:

*Where does the organization want to go and how does it intend to get there?*

## 6. Performance:

*To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?*

## 7. Outlook:

*What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?*

## 8. Basis of preparation and presentation:

*How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?*

These Content Elements can be remembered using the mnemonic GROOMPOPS:

**G**overnance

**R**isks and opportunities

**O**rganizational **O**verview and external environment

business **M**odel

**P**erformance

**O**utlook

**P**reparation and presentation basis

**S**trategy and resource allocation

## V. Benefits and Challenges of Adopting &lt;IR&gt;

A. Benefits—The developers of <IR> have identified the elements of an organization which are most important to stakeholders outside the organization, especially providers of financial capital.

1. This approach provides a clear, condensed version of an organization's annual financial report, guidance, mission, vision, and governance in a single place.
2. This approach provides a more cohesive and efficient approach to corporate reporting. When most major organizations adopt <IR>, comparing one entity to another will be more straightforward, resulting in a more efficient allocation of financial capital.

B. Challenges—Implementation of <IR> will be:

1. Complex for organizations with multiple divisions, subsidiaries, and operations. A separate Integrated Report, with a unique value chain diagram, would be required for each business model.
2. Burdensome for small- and medium-sized organizations. Unless <IR> is allowed to replace any portion of a 10-K or a statement regarding Internal Controls, <IR> will become an additional, incremental work effort.

3. No reporting standards: Judgment must be used in determining how much to report, which could result in inconsistencies between Integrated Report formats for similar organizations. Such inconsistency would appear to negate the benefits of common, comparable Reports.
4. Additional cost for no quantifiable benefits. The benefits described in the <IR> framework are qualitative: no headcount reductions, no production improvements will occur as a result of adoption of <IR>.
5. Forward-looking content elements may breed litigation risk. Providing information regarding the opportunities which may lie ahead for an organization in the short, medium, and long term and explaining how the organization will deal with them may be seen by some stakeholders as predictions or promises of future benefits. If the opportunities do not come to fruition, some stakeholders may resort to litigation.



### Summary

Integrated Reporting is being used by entities around the world; the number of users has grown each year since 2013. An Integrated Report contains information about six different capitals which an organization uses and generates as it goes about its business. The Integrated Reporting framework lists eight Content Elements which, ideally, are included in an Integrated Report. While complete inclusion of all eight Content Elements may not occur for all users, there has been a trend toward dissemination of more nonfinancial information to stakeholders. Adoption of Integrated Reporting is typically a multiyear process, and many organizations will use a phased approach to implementation. Collection, coordination, and reporting of both financial and nonfinancial information as it relates to an organization's value chain has long been the domain of management accountants. Integrated Reporting is an important development within the accounting profession and wise management accountants should be conversant on this topic.

# Topic 2.1 Recognition, Measurement, and Valuation – Assets

## Receivables



**After studying this lesson, you should be able to:**

- Identify issues related to the valuation of accounts receivable, including timing of recognition and estimation of the allowance for credit losses (1.A.2.a).
- Distinguish between receivables sold (factoring) on a with-recourse basis and those sold on a without-recourse basis, and determine the effect on the balance sheet (1.A.2.b).



Many organizations sell to customers without collecting cash at the time of sale. When this happens, an asset called accounts receivable is used to keep track of the amount owed. Every organization that uses accounts receivables also carries the risk that a customer will not pay the organization. As a result, the organization must have methods for accounting for uncollectible accounts receivable. This lesson will discuss the accounting methods associated with both recording accounts receivable and the accounting for credit losses, or bad debts, due to non-payment of accounts receivable. In addition, this lesson will address accounting for factoring, the transaction that occurs when an organization sells its accounts receivable to third parties.

- I. Generally, when organizations sell to customers without collecting cash at the time of sale, an account receivable is created. The customer is expected to pay the organization at some point in the future.
- II. When non-cash sales are made, accounts receivable are recorded at the time revenue is recognized in accordance with revenue recognition under U.S. GAAP. [See the lesson Revenue Recognition in Part 1, Section A, Topic 2.3 for a review of revenue recognition and special considerations for when the typical pattern of recognition is disrupted.]
  - A. Following is the standard accounts receivable entry for a \$100 sale made on account. Note that if the sale was for inventory, a corresponding entry to cost of goods sold and inventory would also be required.

Accounts Receivable	100	
Revenue		100
To record a sale on account		

- B. When the \$100 cash is collected, the entity records the following entry.

Cash	100	
Accounts Receivable		100
To record cash collected on account		

III. Credit risk, also known as default risk, measures the risk that a customer will not ultimately pay the organization as promised at the time of sale.

- A. A customer failing to pay an accounts receivable results in an uncollectible account, or bad debt, to the selling entity.
- B. Organizations must balance the desire for increased sales from selling on credit with the risk of incurring credit losses related to its customers uncollectible accounts.

IV. Organizations account for credit losses, or bad debts, in one of two ways.

A. Allowance method—The organization estimates the amount of bad debt it will incur and records the expense in the same period as the related sales using an allowance account called Allowance for Credit Losses, or Allowance for Uncollectible Accounts.

Bad Debt Expense	1,000	
Allowance for Uncollectible Accts		1,000
To record estimated bad debt expense and allowance for uncollectible accounts		

1. Recording an allowance helps an organization match expenses associated with uncollectible accounts to related revenues.
2. The organization assumes some amount of receivables will not be collected for purposes of estimating bad debt expense.
3. Under the allowance method, the organization is reducing accounts receivable without knowing which specific customers will not pay their debts in the future. The use of a separate account for the estimate of uncollectible receivables will allow the sum of the subsidiary (individual customer) ledgers to reconcile to the account receivable balance.
4. The allowance for uncollectible accounts is subtracted from accounts receivable when preparing the balance sheet. The financial statements, therefore, will reflect only the amount that is expected to be collected, or Net Realizable Value (NRV) of Accounts Receivable. This amount is commonly referred to as Net Accounts Receivable.

Accounts Receivable	\$100,000
Less: Allowance for Uncollectible Accounts	(10,000)
<b>Equals: Net Accounts Receivable</b>	<b>\$ 90,000</b>

5. When a specific customer account is identified as uncollectible, the organization can write off the amount by reducing both the allowance for uncollectible accounts and accounts receivable. This adjustment does not change the amount of Net Accounts Receivable reflected on the balance sheet. The entry to write off the sale noted above would be:

Allowance for Uncollectible Accts	100	
Accounts Receivable		100
To write off a specific customer account as uncollectible		

6. Organizations use two approaches for estimating uncollectible receivables under the allowance method.

- a. Percentage of receivables or balance sheet approach—The organization assumes a percentage of existing accounts receivable will not be collectible and adjusts the allowance account to reflect that percentage each time the financial statements are prepared.
- Because this method is based on a percentage of accounts receivable, a balance sheet account, it is often referred to as the balance sheet approach.
  - The accounts receivable aging is often used to estimate the total amount of uncollectible accounts at the end of the period. The estimated amount is compared to the amount remaining in the allowance account and the necessary adjustment is recorded.
    - If the allowance for uncollectible accounts is too small, bad debt expense is increased and income goes down.
    - If the allowance for uncollectible accounts is too large, bad debt expense is decreased and income goes up.
- b. Illustration: An organization has the following accounts receivable aging and estimates for expected uncollectible percentages at the end of Year 1.

	<u>0–30 days</u>	<u>31–60 days</u>	<u>61–90 days</u>	<u>&gt; 90 days</u>	<u>Total</u>
Amount	\$295,000	\$87,000	\$15,000	\$3,000	\$400,000
% Uncollectible	3%	5%	10%	60%	
Allowance needed	\$ 8,850	\$ 4,350	\$ 1,500	\$1,800	\$ 16,500

If the current balance in the allowance account is \$15,000, the organization makes the following entry:

Bad Debt Expense	1,500	
Allowance for Uncollectible Accounts		1,500
To adjust allowance for uncollectible accounts at end of Year 1		

If, on the other hand, the current balance in the allowance account is \$17,000, the organization makes the following entry:

Allowance for Uncollectible Accounts	500	
Bad Debt Expense		500
To adjust allowance for uncollectible accounts at end of Year 1		

- c. Percentage of revenues or income statement approach—The organization assumes a certain percentage of sales are uncollectible and records bad debt expense based on that percentage of revenue in a given period.
- Because this method is based on a percentage of revenue, an income statement account, this is often referred to as the income statement approach.
  - Periodically, an organization will review its allowance for uncollectible accounts to ensure that it is sufficient to cover uncollectible amounts and adjust the balance as needed. Regular large adjustments to the allowance would indicate that the percentage of sales being used for the estimate should be adjusted going forward.

- d. Illustration: An organization has \$100,000 of revenues each month and assumes 1% of all revenues are uncollectible. The organization makes the following entry each month:

Bad Debt Expense	1,000	
Allowance for Uncollectible Accounts		1,000
To record monthly bad debt expense		

If, at the end of the year, the balance in the allowance account is \$10,500 (after write-offs during the year), and a review of the accounts receivable aging indicates the need for a \$16,500 allowance, the organization would adjust the allowance by recording an additional \$6,000 in bad debt expense. In addition, the organization would likely increase its percentage of sales used for recording bad debt expense from 1% to 1.5% going forward.

- B. Direct write-off method—The organization waits until a specific account is identified as not collectible and removes the accounts receivable with an offsetting entry to bad debt expense.

Bad Debt Expense	100	
Accounts Receivable		100
To write off an uncollectible account receivable		

- Under U.S. tax laws, bad debts are only recorded using the direct write-off method.
- The direct write-off method is the simplest method to use.
- A disadvantage of using the direct write-off method is that the expense for bad debt is not matched to the revenue associated with the sale.
- Generally, the direct write-off method is not acceptable for U.S. GAAP reporting purposes unless the uncollectible amounts are clearly immaterial or there is no reasonable basis for estimating bad debts.



**Practice Question**

Company X has the following accounts receivable aging and estimates for expected uncollectible percentages at the end of Year 1.

	<u>0–30 days</u>	<u>31–60 days</u>	<u>61–90 days</u>	<u>&gt; 90 days</u>	<u>Total</u>
Amount	\$398,000	\$187,000	\$55,000	\$10,000	\$650,000
% Uncollectible	2%	4%	8%	50%	

Company X has a current credit balance in its allowance for uncollectible accounts of \$22,000 and bad debt expense of \$62,000 before adjusting entries.

- What is the necessary amount of the adjustment to bad debt expense?
- What is the Net Accounts Receivable that will be reflected in the balance sheet after the adjustment is made?

**Answer**

1. Allowance for uncollectible accounts needs to be adjusted by \$2,840 and bad debt expense will increase by that amount:

	<u>Amount</u>	×	<u>Percentage</u>	=	<u>Estimate</u>
0–30 days	\$398,000		.02		\$ 7,960
31–60 days	187,000		.04		7,480
61–90 days	55,000		.08		4,400
> 90 days	10,000		.50		5,000
					<u>\$24,840</u>

Current credit balance in the allowance for uncollectible accounts before adjustment is \$22,000 so it must increase by \$2,840 to bring the allowance to the required balance of \$24,840.

2. After the adjustment, the Net Accounts receivable balance shown in the balance sheet is \$625,160, calculated as follows:

Accounts Receivable	\$650,000
Less: Allowance for Uncollectible Accounts	<u>(24,840)</u>
<b>Equals: Net Accounts Receivable</b>	<b>\$625,160</b>

- V. Organizations can sell, or factor, accounts receivable to third parties and receive a percentage of the receivables immediately as cash.

- A. There are several advantages and disadvantages to factoring receivables.

1. Advantages

- a. It is a quick source of cash.
- b. Fees are usually based on the credit quality of the organization's customers, *not* the organization itself.
- c. The organization can raise cash without incurring any additional debt.
- d. The organization does not have to secure financing with existing assets.

2. Disadvantages

- a. It is a short-term cash solution.
- b. Investors and creditors could perceive factoring as a sign of financial difficulty.
- c. Fees and expenses can be very high.

- B. Factoring can be done either with recourse or without recourse.

1. With recourse means the organization selling accounts receivable bears the risk of loss relative to collecting the customers' balances.

- a. Fees are generally lower when factoring with recourse than without recourse.
- b. If the customer does not pay its accounts receivable, the selling organization is required to compensate the factor for the loss.

- c. The selling organization must estimate the amount of the recourse obligation and record it at the time of the factoring.
- d. Illustration: Company A sells \$100,000 of accounts receivable to Company B with recourse. Company B, the factor, assesses a 2% finance charge and withholds an additional 5% to cover possible uncollectible amounts. Company A estimates the recourse obligation to be \$3,500. Company A makes the following entry to record the factoring:

Cash	93,000	
Due from Factor	5,000	
Loss on Factoring	5,500	
Accounts Receivable		100,000
Recourse Obligation		3,500
To record factoring of receivables and recognition of recourse obligation		

The loss on the factoring transaction is the sum of the 2% finance charge and the estimated recourse obligation (\$2,000 + \$3,500). The Due from Factor and Recourse Obligation accounts will be settled once both parties agree that all collection efforts have been exhausted and the amount of uncollectible accounts is known.

- 2. Without recourse means the factor (the organization purchasing the accounts receivable from the selling organization) bears the risk of loss relative to collecting the customers' balances.
  - a. The organization selling the accounts receivable will generally receive less cash when factoring without recourse to compensate for the increased risk to the factor.
  - b. If the customer does not pay its accounts receivable, the selling organization is not impacted by this nonpayment.
  - c. Illustration: Company A sells \$100,000 of accounts receivable to Company B without recourse. Company B, the factor, assesses a 5% finance charge and withholds an additional 4% to cover late-paying customers. Company A makes the following entry to record the factoring:

Cash	91,000	
Due from Factor	4,000	
Loss on Factoring	5,000	
Accounts Receivable		100,000
To record factoring of receivables without recourse		

In this case, the loss on the factoring transaction is simply the 5% finance charge as there is no estimated recourse obligation. The Due from Factor will be settled once all money has been collected from customers or both parties agree that all collection efforts have been exhausted.



### Practice Question

Company Y sells \$150,000 of accounts receivable to Company Z with recourse. Company Z, the factor, assesses a 4% finance charge and withholds an additional 3% to cover possible uncollectible amounts. Company Y estimates the recourse obligation to be \$7,000.

1. What is the amount of the loss on factoring that Company Y will record upon the sale of these receivables to Company Z?
2. Assume Company Y wishes to renegotiate the sale of receivables to be without recourse instead. Is the amount of the finance charge likely to be greater than or less than 4%? Why?

### Answer

1. The loss on factoring will include both the finance charge and the amount of the recourse obligation:

Finance Charge ( $\$150,000 \times .04$ )	\$ 6,000
Recourse Obligation	<u>7,000</u>
<b>Total Loss on Factoring</b>	<b>\$13,000</b>

2. The finance charge is likely to be greater than 4% as Company Z will want compensation for taking on the risk of loss associated with collectability of the accounts if the sale is without recourse.



### Summary

According to revenue recognition principles under U.S. GAAP, when non-cash sales are made, accounts receivable are recorded at the time revenue is recognized. Credit risk, or default risk, is the risk that a customer will ultimately not pay the organization as promised. There are two methods of accounting for credit losses, also known as bad debts. The first is the allowance method, which is when the organization estimates the amount of bad debt it will incur and records the expense in the same period as the related sales using an allowance account. The second method is the direct write-off method, which is when an organization waits until a specific account is identified as not collectible to remove the account receivable using an offsetting entry to bad debt expense. Organizations sometimes factor, or sell, their accounts receivable to a third party in order to receive a percentage of the receivables immediately as cash.



## Inventory



### After studying this lesson, you should be able to:

- Identify issues in inventory valuation, including which goods to include, what costs to include, and which cost assumption to use (1.A.2.c).
- Identify and compare cost flow assumptions used in accounting for inventories (1.A.2.d).
- Calculate the effect on income and on assets of using different inventory methods (1.A.2.f).
- Identify advantages and disadvantages of the different inventory methods (1.A.2.h).
- Recommend the inventory method and cost flow assumption that should be used for a firm given a set of facts (1.A.2.i).
- Demonstrate an understanding of the lower of cost or market rule for LIFO and the retail inventory method and the lower of cost and net realizable value rule for all other inventory methods (1.A.2.e).
- Analyze the effects of inventory errors (1.A.2.g).



Most organizations that deliver goods to their customers must carry inventory. When accounting for inventory an organization must consider which costs to include in the inventory as well as which cost flow assumptions to use. This lesson will discuss many issues related to inventory including: costs to be included in inventory, periodic vs. perpetual inventory systems, the four most common cost flow assumptions, accounting for declines in inventory value, inventory errors, and changes to inventory costing methods.

- I. Many organizations, including manufacturing and construction firms, carry inventory to deliver goods to their customers.
  - A. Organizations must consider a variety of factors to determine the proper accounting for their inventory.
    1. Which goods and related costs should be included in inventory?
      - a. Costs to get the items ready for sale are included in inventory and are expensed as costs of sales when the inventory is sold.
      - b. Costs not included in inventory (selling costs, shipping to the customer, etc.) are expensed as operating expenses when incurred.
      - c. The inclusion or exclusion of costs in inventory can have a significant impact on an organization's gross profit.
    2. Which inventory costing assumption should the organization use?
      - a. Depending on cost behavior, different inventory methods (described below) can have a material effect on an organization's gross profit.
      - b. Organizations should select the inventory method which best reflects its economic reality.

B. Organizations can use either the periodic or the perpetual method to account for inventory.

1. Periodic method: The organization’s beginning inventory balance is reflected on the balance sheet throughout the year.

- a. Purchases on account are recorded in a Purchases account separate from inventory with the offsetting entry to Accounts Payable.
- b. Sales to customers during the period do not affect the inventory accounts in real time.
- c. During the period, the organization tracks transactions like transportation in, purchase discounts, and purchase returns (not sales returns) in separate accounts for each type of transaction.
- d. At the end of each period, the organization will count its inventory and calculate cost of goods sold using the amounts from all of the inventory-related accounts:

Beginning Inventory	XX,XXX
Plus: Transportation In	XXX
Purchases	XXX,XXX
Less: Purchase Returns and Allowances	(X,XXX)
Purchase Discounts	(X,XXX)
Goods Available for Sale	XXX,XXX
Less: Ending Inventory	(XX,XXX)
<b>Cost of Goods Sold</b>	<b>XXX,XXX</b>

- e. An adjusting entry is then made to accomplish the following:
  - i. Remove the beginning inventory balance
  - ii. Record the correct ending inventory balance
  - iii. Close various inventory related accounts used during the year (Purchases, Transportation in, Purchase Returns and Allowances, Purchase Discounts)
  - iv. Record cost of sales for the period (this is the amount needed to balance the entry)

An example of this entry is shown below.

Merchandise Inventory (Ending)	XX	
Purchase Returns and Allowances	XX	
Purchase Discounts	XX	
Cost of Goods Sold	XX	
Merchandise Inventory (Beginning)		XX
Purchases		XX
Transportation In		XX
To correct inventory balance and record cost of goods sold.		

2. Perpetual method: The organization records costs associated with inventory purchases and cost of sales directly to the merchandise inventory account as transactions (purchases, sales, returns, discounts) take place throughout the year.
    - a. The perpetual method allows organizations to match cost of sales and inventory transactions more closely with their sales and cash expenditures during the year.
    - b. A moving average costing system requires a perpetual inventory method.
- C. Organizations should include the following items in their inventories:
1. All goods available for sale. Examples for certain industries include the following:
    - a. Manufacturing organizations—All components that are part of the final product.
      - i. Components
      - ii. Assemblies
      - iii. Freight required to transport these materials
      - iv. Handling associated with preparing the materials for eventual manufacturing
    - b. Retail organizations—Cost of goods purchased for resale.
    - c. Construction organizations—The cost of building supplies to be part of the finished project.
  2. All freight, import duties, and related transportation costs required to bring goods for sale to the organization.
  3. All direct labor associated with turning purchased components and supplies into finished products.
    - a. Labor associated with machining or cutting raw material into components usable for production.
    - b. Labor associated with assembling components into goods available for sale.
  4. All manufacturing overhead expenses required to support the process of manufacturing or construction. Examples include:
    - a. Labor costs associated with factory maintenance and other functions that are not associated directly with producing goods for sale.
    - b. Costs of machinery required for manufacturing.
    - c. Utility costs for manufacturing facilities.
    - d. Office and administrative expenses supporting the manufacture of goods.
- D. For manufacturing organizations, inventory will consist of three categories.
1. Raw materials, which are the purchased goods not yet placed into production and all related inbound transportation costs.
  2. Work in process, which accounts for all costs of goods in production but not yet completed.
  3. Finished goods, which are products available for sale.
- E. Retail or merchandising organizations generally only have Finished Goods inventory.
- F. Service organizations often use Work-in-Process accounts to account for the work professionals perform directly related to revenue-producing projects. The accounting is very similar to that of manufacturing accounting.



**Practice Question**

Jazz Note Corporation had the following information about inventory transactions during the year 20X4:

Beginning Inventory	120 units @ \$ 5
Purchases	850 units @ \$ 5
Sales	670 units @ \$10
Ending Inventory	300 units @ \$ 5

Prepare the journal entries and calculate cost of goods sold and ending inventory using:

1. The perpetual inventory method.
2. The periodic inventory method.

**Answer**

1. Perpetual Inventory Method:

*Beginning Inventory:* No entry needed. The Inventory account shows the inventory on hand at \$600.

*Purchase of 850 units at \$5:*

Inventory	4,250	
Accounts Payable		4,250
Purchase 850 units at \$5/unit		

*Sale of 670 units @ \$10:*

Accounts Receivable	6,700	
Sales Revenue		6,700
Cost of Goods Sold	3,350	
Inventory		3,350
Sell 670 units at \$10/unit and record associated cost of goods sold at \$5/unit		

*Ending Inventory of 300 units @ \$5:* No entry needed because the inventory account already reflects the ending balance as shown below:

	<b>Inventory</b>		
Beginning Inventory	600		
Purchases	4,250	3,350	Sales
Ending Inventory	1,500		