STUDY UNIT ONE
BASIC FINANCIAL STATEMENT ANALYSIS

Financial Statement Analysis

Management accountants deal with aspects of external financial reporting and thus need to be able to prepare and understand the principal financial statements of a business and to know the limitations of financial statement information. Areas tested on the CMA exam include asset and liability recognition and measurement, equity recognition and measurement, revenue, expenses, extraordinary items, and earnings per share. Knowledge of the SEC and its reporting requirements is also tested, as are annual report contents.

This study unit is the **first of three** on **financial statement analysis**. The relative weight assigned to this major topic in Part 2 of the exam is **25%**. The three study units are

Study Unit 1: Basic Financial Statement Analysis
Study Unit 2: Financial Performance Metrics – Financial Ratios
Study Unit 3: Profitability Analysis and Analytical Issues

After studying the outline and answering the questions in this study unit, you will have the skills necessary to address the following topics listed in the ICMA's Learning Outcome Statements:

Part 2 – Section A.1. Basic financial statement analysis

For the statement of financial position (balance sheet), the statement of earnings (income statement), statement of cash flows, and the statement of changes in shareholders' equity, the candidate should be able to:

- a. identify the users of these financial statements and their needs
- b. demonstrate an understanding of the purposes and uses of each statement
- c. identify the major components and classifications of each statement
- d. identify the limitations of each financial statement
- e. identify, describe, and calculate how a financial transaction affects the elements of each of the financial statements and the resulting impact on financial ratios
- f. for the statement of cash flows, demonstrate an understanding of both the "direct" and "indirect" methods
- g. for the balance sheet and income statement, prepare and analyze common-size financial statements
- h. for the balance sheet and income statement, prepare and analyze common base-year financial statements (percentage of assets and sales, respectively)
- i. for the balance sheet and income statement, calculate growth of key financial line items

Part 2 – Section A.4. Analytical issues in financial accounting

d. prepare and/or reconcile the statement of cash flows to the income statement and the balance sheet using the indirect method

1.1 BASIC FINANCIAL STATEMENTS AND THEIR USERS

1. The **basic financial statements** consist of the following:
   a. Statement of financial position (“balance sheet”)
   b. Statement of earnings (“income statement”)
   c. Statement of cash flows
   d. Statement of changes in shareholders’ equity (“statement of retained earnings”)
2. Disclosures of **changes in equity** and in the number of shares of equity securities are necessary whenever financial position and results of operations are presented.
   a. These disclosures may occur in the basic statements, in the notes thereto, or in separate statements.
   b. **Comprehensive income** must be displayed in a financial statement given the same prominence as the other statements, but no specific format is required.
3. The basic financial statements and notes of a business enterprise serve as vehicles for achieving the **objectives of financial reporting**.
   a. **Supplementary information** (e.g., on changing prices) and various other means of financial reporting (such as management’s discussion and analysis) are also useful.
   b. The basic financial statements **complement** each other.
      1) They describe different aspects of the same transactions.
      2) More than one statement is necessary to provide information for a specific economic decision.
   c. The **elements** of one statement **articulate** (are interrelated) with those of other statements.
      1) The **balance sheet** reports assets, liabilities, equity, and investments by owners **at a moment in time**.
         a) The **statement of income** and **statement of retained earnings** report revenues, expenses, gains, losses, and distributions to owners **over a period of time**.
      2) The elements in the first group are changed by those in the second group and are their cumulative result:

	Beginning balance	(Balance sheet)
+/–	Changes during the period	(Statements of income and retained earnings)
	Ending balance	(Balance sheet)

      3) Accordingly, financial statements that report the first type of elements articulate with those reporting the second type and vice versa.
      4) The **notes** are considered part of the basic financial statements.
         a) They amplify or explain information recognized in the statements and are an integral part of statements prepared in accordance with GAAP.
         b) Notes should not be used to correct improper presentations.

4. **Users of financial statements** may directly or indirectly have an economic interest in a specific business. Users with direct interests usually invest in or manage the business, and users with indirect interests advise, influence, or represent users with direct interests.
   a. Users with **direct interests** include
      1) Investors or potential investors
      2) Suppliers and creditors
      3) Employees
      4) Management
   b. Users having **indirect interests** include
      1) Financial advisers and analysts
      2) Stock markets or exchanges
      3) Regulatory authorities
5. The users of financial statements also may be grouped by their relation to the business.
   a. **Internal users** use financial statements to make decisions affecting the operations of the business. These users include management, employees, and the board of directors.
      1) Management needs financial statements to assess financial strengths and deficiencies, to evaluate performance results and past decisions, and to plan for future financial goals and steps toward accomplishing them.
      2) Employees want financial information to negotiate wages and fringe benefits based on the increased productivity and value they provide to a profitable firm.
   b. **External users** use financial statements to determine whether doing business with the firm will be beneficial.
      1) Investors need information to decide whether to increase, decrease, or obtain an investment in a firm.
      2) Creditors need information to determine whether to extend credit and under what terms.
      3) Financial advisers and analysts need financial statements to help investors evaluate particular investments.
      4) Stock exchanges need financial statements to evaluate whether to accept a firm's stock for listing or whether to suspend the stock's trading.
      5) Regulatory agencies may need financial statements to evaluate the firm's conformity with regulations and to determine price levels in regulated industries.
6. The limitations of the various financial statements include the following:
   a. The balance sheet shows a company's financial position at a single point in time; accounts may vary significantly a few days before or after the publication of the balance sheet. Also, many balance sheet items, such as fixed assets, are valued at historical costs, which may bear no resemblance to the current value of those items. Even those assets reported at their current fair values may not always faithfully represent what a company could sell those items for on an open market. Also, contingent liabilities are not always shown on the balance sheet; in some cases, liabilities may arise that were not expected.
   b. The income statement does not always show all items of income and expense. For example, some items of "other comprehensive income," such as foreign exchange translation adjustments, are not reported in the calculation of net income. Instead, these items are reported on a statement of Other Comprehensive Income, which is usually effectively hidden on the statement of shareholders' equity.

c. The limitation of the statement of cash flows is that there is not always common agreement on what is an operating flow and an investment or financing flow. In addition, some analysts complain that the option to use the indirect method of reporting cash flows (which is used by approximately 97% of reporting companies) instead of the direct method may be hiding important information.

d. The statement of changes in shareholders' equity (or retained earnings statement) is rather straightforward, but many investors ignore this statement. Thus, the biggest limitation is user ignorance. Since the statement of shareholders' equity typically includes items of other comprehensive income, it is important that users examine the statement closely.

1.2 STATEMENT OF FINANCIAL POSITION

1. According to the Financial Accounting Standards Board's (FASB's) Conceptual Framework, the **statement of financial position (balance sheet)** "provides information about an entity's assets, liabilities, and equity and their relationships to each other at a moment in time." It helps users to assess "the entity's liquidity, financial flexibility, profitability, and risk."

   a. The **elements** of the balance sheet make up a detailed presentation of the basic accounting equation for a business enterprise:

      Assets = Liabilities + Equity

      1) The left side of the equation depicts the enterprise's **resource structure**. The right side depicts the **financing structure**.
      2) Balance sheet accounts are **real (permanent) accounts**. Their balances carry over from one period to the next.
      3) The equation is based on the proprietary theory. The owners' **equity** in an enterprise **(residual interest)** is what remains after the economic obligations of the enterprise are subtracted from its economic resources.

   b. The **format** of the balance sheet is not standardized, and any method that promotes full disclosure and understandability is acceptable.

      1) The **account (or horizontal) form** presents the resource structure on the left and the financing structure on the right.
      2) The **report (or vertical) form** is also commonly used. It differs from the account form only in that liabilities and equity are below rather than beside assets.

2. **The Resource Structure -- A Firm's Assets**

   a. **Current assets** consist of "cash and other assets or resources commonly identified as reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business."

      1) The **operating cycle** is the average time between the acquisition of resources and the final receipt of cash from their sale as the culmination of the entity's revenue-generating activities.

         a) If the operating cycle is less than a year, 1 year is the basis for defining current and noncurrent assets.

2) Current assets are usually presented in **descending order of liquidity**.

Current assets:	
Cash and equivalents	$ 10,000
Short-term investments	586,000
Receivables	22,000
Inventories	112,000
Prepaid expenses	6,000
Total current assets	$736,000

b. **Noncurrent assets** are usually presented in an order determined by convention rather than by liquidity.

1) **Long-term investments and funds** typically include
   a) Investments in securities intended to be held on a long-term basis
   b) Restricted funds, such as bond sinking funds or plant expansion funds
   c) Cash surrender value of life insurance policies
   d) Capital assets not used in current operations, such as idle facilities or land held for a future plant site or for speculative purposes
2) **Property, plant, and equipment (PPE)** consist of tangible items used in operations.
   a) PPE are recorded at cost and are shown net of accumulated depreciation if depreciable. They include
      i) Land and depletable natural resources, e.g., oil and gas reserves
      ii) Buildings, machinery, equipment, furniture, fixtures, leasehold improvements, land improvements, leased assets held under capital leases, and other depreciable assets
3) **Intangible assets** are defined as nonfinancial assets without physical substance.
   a) Examples are patents, copyrights, trademarks, trade names, franchises, and purchased goodwill.
4) **Other noncurrent assets** include noncurrent assets not readily classifiable elsewhere. Accordingly, there is little uniformity of treatment. Among the items typically reported as other assets are
   a) Long-term receivables arising from unusual transactions, e.g., loans to officers or employees and sales of capital assets
   b) Bond issue costs
   c) Machinery rearrangement costs (also classifiable as PPE)
   d) Long-term prepayments
   e) Deferred tax assets arising from interperiod tax allocation
5) The category **deferred charges** (long-term prepayments) appears on some balance sheets.
   a) Many of these items, for example, bond issue costs and rearrangement costs, which involve long-term prepayments, are frequently classified as other assets.

3. **The Financing Structure -- A Firm's Liabilities and Owners' Equity**

   a. **Current liabilities** are "obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current liabilities."

      1) Their order of presentation is usually governed by **nearness to maturity**.

Current liabilities:	
Accounts payable	$ 2,181
Wages payable	11,015
Notes payable	10,500
Unearned revenues	6,187
Income taxes payable	9,055
Current maturities of long-term debt	5,000
Total current liabilities	$43,938

         a) **Accounts** and **wages payable** result from the acquisition of goods and services.

         b) **Notes payable** are tools of short-term cash generation.

         c) **Unearned revenues** represent cash received in advance of the delivery of goods (such as subscriptions) or performance of services (such as a legal retainer fee).

         d) **Income taxes payable** are liabilities to various levels of government for revenues recognized in the past.

         e) **Current maturities of long-term debt** are that portion of long-term debt (e.g., bonds issued) that must be retired using current assets.

      2) Because current liabilities require the use of current assets or the creation of other current liabilities, they do not include

         a) **Short-term obligations intended to be refinanced** on a long-term basis when the ability to consummate the refinancing has been demonstrated.

            i) This ability is demonstrated by a post-balance-sheet-date issuance of long-term debt or by entering into a financing agreement that meets certain criteria.

         b) Debts to be paid from funds accumulated in accounts classified as **noncurrent assets**.

            i) Hence, a liability for bonds payable in the next period will not be classified as current if payment is to be from a noncurrent fund.

   b. **Noncurrent liabilities** include the **noncurrent portions** of the following:

Noncurrent liabilities:	
Long-term notes payable ($100,000 face amount, net of unamortized discount of $12,857)	$ 87,143
Bonds payable ($2,000,000 face amount, net of unamortized premium of $100,000)	2,100,000
Liabilities under capital leases	212,456
Pension obligations	1,277,450
Deferred tax liability arising from interperiod tax allocation	99,011
Obligations under product or service warranty agreements	12,094
Advances for long-term commitments to provide goods or services	6,107
Advances from affiliated entities	6,998
Deferred revenue	1,024
Total noncurrent liabilities	$3,802,283

c. **Equity** of a business enterprise is the **residual interest** after total liabilities are deducted from total assets.

Stockholders' equity:		
Contributed capital:		
Preferred stock, 6% cumulative, no par, 50,000 shares authorized and outstanding	$2,000,000	
Common stock, $1 par, 10,000,000 shares authorized, 8,000,000 issued and outstanding	8,000,000	
Additional contributed capital	357,000	
Total contributed capital		$10,357,000
Retained earnings		1,358,449
Treasury stock, at cost, 500,000 common shares		(645,000)
Accumulated other comprehensive income, net		12,707
Total stockholders' equity		$20,082,156

1) **Preferred stock** (if any) is generally listed first since it stands first in line during liquidation.
   a) The par value (if any), dividend percentage, cumulative and/or participating status, number of shares authorized, and number of shares outstanding are reported.
2) **Common stock** is issued by every corporation.
   a) The par value, number of shares authorized, and number of shares outstanding are reported.
3) **Additional paid-in (contributed) capital** is the amount received in excess of par value at the time stock was sold.
   a) A single total is presented for all classes of stock combined.
4) **Paid-in (contributed) capital** is the total amount provided by the firm's shareholders.
5) **Retained earnings** can be restricted or unrestricted depending on the board of directors' intent.
   a) Restricted retained earnings do not constitute a pool of resources; they are simply an indication of their unavailability for disbursement as dividends.
6) **Treasury stock** is the firm's own stock that has been repurchased either to shrink the breadth of the firm's ownership base or to have a pool of stock to disburse in the form of dividends.
   a) Treasury stock is reported either at cost (as a deduction from total equity) or at par (as a direct reduction of the relevant contributed capital account). A corporation can never report its own stock as an asset.

4. **Major Footnote Disclosures**

a. The first footnote accompanying any set of complete financial statements is generally one describing **significant accounting policies**, such as the use of estimates and rules for revenue recognition.

b. Footnote disclosures and schedules specifically related to the **balance sheet** include
   1) Investment securities
   2) Property, plant, and equipment holdings
   3) Maturity patterns of bond issues
   4) Significant uncertainties, such as pending litigation
   5) Details of capital stock issues

1.3 STATEMENT OF INCOME AND STATEMENT OF RETAINED EARNINGS

1. The results of operations are reported in the income statement (statement of earnings) on the **accrual basis** using an approach oriented to historical transactions.
   a. The traditional income statement reports the results of activities during a period of time.

      Revenues – Expenses + Gains – Losses = Income (Loss)

   b. **Revenue and expense accounts** are nominal (temporary) accounts. They are zeroed out (closed) periodically and their balances transferred to real (permanent) accounts on the balance sheet.
      1) **Revenues and expenses** stem from a firm's **central and ongoing** operations.
      2) **Gains and losses** report the results of **peripheral or incidental** transactions.
2. **Transactions Included in Income**
   a. **All transactions** affecting the net change in equity during the period are included except
      1) Transactions with owners
      2) Prior-period adjustments
      3) Items reported initially in other comprehensive income
      4) Transfers to and from appropriated retained earnings
      5) Adjustments made in a quasi-reorganization
   b. This treatment reflects the all-inclusive approach to reporting income.
3. **Income statement format.** Three formats are commonly used for presentation of income or loss from continuing operations:
   a. The **single-step income statement** provides one grouping for revenue items and one for expense items. The single step is the one subtraction necessary to arrive at net income.

Bonilla Company
Income Statement
For Year Ended December 31, Year 1

Revenues:		
Net sales	$XXX	
Other revenues	XXX	
Gains	XXX	
Total revenues		$ XXX
Expenses:		
Costs of goods sold	$XXX	
Selling and administrative expenses	XXX	
Interest expense	XXX	
Losses	XXX	
Income tax expense	XXX	
Total expenses		XXX
Net income		$ XXX
Earnings per common share		$Y.YY

b. The **multiple-step income statement** matches operating revenues and expenses in a section separate from nonoperating items, enhancing disclosure by presenting intermediary totals rather than one net income figure.

Willis Company
Income Statement
For Year Ended December 31, Year 1

Revenues:			
Gross sales			$ XXX
Less: Sales discounts		$XXX	
Sales returns and allowances		XXX	XXX
Net sales			$ XXX
Cost of goods sold:			
Beginning inventory		$XXX	
Purchases	$XXX		
Less: Purchase returns and discounts	XXX		
Net purchases	$XXX		
Transportation-in	XXX	XXX	
Goods available for sale		$XXX	
Less: Ending inventory		XXX	
Cost of goods sold			XXX
Gross profit			$ XXX
Operating expenses:			
Selling expenses:			
Sales salaries and commissions	$XXX		
Freight-out	XXX		
Travel	XXX		
Advertising	XXX		
Office supplies	XXX	XXX	
Administrative expenses:			
Executive salaries	XXX		
Professional salaries	XXX		
Wages	XXX		
Depreciation	XXX		
Office supplies	XXX	XXX	
Total operating expenses			XXX
Income from operations			$ XXX
Other revenues and gains:			
Dividend revenue		$XXX	XXX
Other expenses and losses:			
Interest expense		$XXX	
Loss on disposal of equipment		XXX	XXX
Income before taxes *			$ XXX
Income taxes			XXX
Net income *			$ XXX
Earnings per common share			$Y.YY

* If discontinued operations were being reported, these captions would have been "Income from continuing operations before taxes" and "Income from continuing operations," respectively.

c. The **condensed income statement** includes only the section totals of the multiple-step format.

Marzullo Company
Income Statement
For Year Ended December 31, Year 1

Net sales		$ XXX
Cost of goods sold		XXX
Gross profit		$ XXX
Selling expenses	$XXX	
Administrative expenses	XXX	XXX
Income from operations		$ XXX
Other revenues and gains		XXX
Other expenses and losses		XXX
Income before taxes *		$ XXX
Income taxes		XXX
Net income *		$ XXX
Earnings per common share		$Y.YY

* If discontinued operations were being reported, these captions would have been “Income from continuing operations before taxes” and “Income from continuing operations,” respectively.

4. **Typical Items of Cost and Expense**

   a. **Cost of goods sold** equals cost of goods manufactured (or purchases for a retailer) adjusted for the change in finished goods inventory. Adding beginning inventory to purchases produces goods available for sale.

      1) **Cost of goods manufactured** is equivalent to a retailer’s purchases. It equals all manufacturing costs incurred during the period, plus beginning work-in-process, minus ending work-in-process. It also may be stated as cost of goods sold, plus ending finished goods inventory, minus beginning finished goods inventory.

   b. Other Expenses

      1) **Selling expenses** are those incurred in selling or marketing.

         a) Examples include sales representatives’ salaries, rent for sales department, commissions, and traveling expense; advertising; sales department salaries and expenses; samples; and credit and collection costs. Shipping costs are also often classified as selling costs.

      2) **General and administrative expenses** are incurred for the direction of the enterprise as a whole and are not related wholly to a specific function, e.g., selling or manufacturing.

         a) They include accounting, legal, and other fees for professional services; officers’ salaries; insurance; wages of office staff; miscellaneous supplies; and office occupancy costs.

      3) **Interest expense** is recognized based on the passage of time. In the case of bonds, notes, and capital leases, the **effective interest method** is used.

5. **Reporting irregular items.** When an enterprise reports discontinued operations or extraordinary items, these must be presented in a separate section after income from continuing operations.

   a. **Discontinued operations** are reported in two components:

      1) Income or loss from operations of the division from the first day of the reporting period until the date of disposal

      2) Gain or loss on the disposal of the divisions

b. **Extraordinary items** must meet two criteria:

1) To be considered extraordinary, an item must be **both unusual in nature and infrequent in occurrence** in the environment in which the entity operates.
2) Write-downs of receivables and inventories, translation of foreign currency amounts, disposal of a segment, sale of productive assets, effects of strikes, and accruals on long-term contracts can never be considered extraordinary.

c. Because these items are reported **after the presentation of income taxes**, they must be shown **net of tax**.

d. Appropriate **per share amounts** must be disclosed, either on the face of the statement or in the accompanying notes.

e. EXAMPLE:

Income from continuing operations		$XXX
Discontinued operations:		
Income from operations of divested division, net of applicable income taxes of $XXX	$XXX	
Loss on disposal of divested division, net of applicable income taxes of $XXX	XXX	XXX
Income before extraordinary item		$XXX
Extraordinary item:		
Loss from volcanic eruption, net of applicable income taxes of $XXX		XXX
Net income		$XXX
Per share of common stock:		
Income from continuing operations		$Y.YY
Income from operations of divested division, net of tax		Y.YY
Loss on disposal of divested division, net of tax		(Y.YY)
Income before extraordinary item		$Y.YY
Extraordinary loss, net of tax		(Y.YY)
Net income		$Y.YY

6. The income statement and the **statement of retained earnings** (presented separately or combined) are designed to broadly reflect the results of operations.

a. Most entities report changes in retained earnings in a **statement of equity (changes in equity)** or a separate statement.

b. The statement of retained earnings consists of beginning retained earnings, plus or minus any prior-period adjustments (net of tax); net income (loss); dividends paid or declared; and certain other rare items, e.g., quasi-reorganizations. The final amount is ending retained earnings.

c. EXAMPLE:

Retained earnings, Jan. 1, as originally reported	$XXX
Correction for overstatement of depreciation expense in prior period	XXX
Retained earnings, Jan. 1, as restated	$XXX
Net income	XXX
Cash dividends paid	(XXX)
Retained earnings, Dec. 31	$XXX

d. The retained earnings balance is sometimes divided into **appropriated** and **unappropriated** amounts.

e. A **quasi-reorganization** eliminates a deficit in retained earnings through reductions in other capital accounts. It accomplishes in a simpler way the same purpose as a legal reorganization. Elimination of the deficit permits a company to pay dividends.

7. **Comprehensive Income**

   a. Certain income items are deliberately **excluded from the calculation of net income** and instead are **included in comprehensive income**.

      1) Requiring these items to be included in net income would be misleading. They typically represent valuation adjustments, not independent economic events.

   b. **Other comprehensive income (OCI)** is the subtotal of all these items of comprehensive income that are not included in net income.

      1) The **three principal items** of comprehensive income are typically:

         a) Changes in the fair values of available-for-sale securities
         b) Foreign currency translation adjustments
         c) The excess of an additional pension liability over any prior service cost

   c. All components of comprehensive income must be reported in a financial statement **displayed with the same prominence** as the other statements.

      1) No specific format is specified, but reporting the components of OCI and comprehensive income below net income is encouraged.
      2) EXAMPLE: Separate statement of comprehensive income

Bonilla Company
Statement of Comprehensive Income
For Year Ended December 31, Year 1

Net income		$XXX
Other comprehensive income (net of tax):		
Foreign currency translation adjustment	$XXX	
Minimum pension liability adjustment	XXX	
Unrealized holding loss on securities	(XXX)	XXX
Comprehensive income		$XXX

8. **Major Footnote Disclosures**

   a. Footnote disclosures and schedules specifically related to the **income statement** include

      1) Earnings per share
      2) Depreciation schedules
      3) Components of income tax expense
      4) Components of pension expense

1.4 STATEMENT OF CASH FLOWS

1. If an entity reports financial position and results of operations, it **must present a statement of cash flows** for any period for which results of operations are presented. The statement of cash flows is thus part of a full set of financial statements.

   a. Cash flow per share, however, is **not** reported.
   b. The **primary purpose** of a statement of cash flows is to provide information about the cash receipts and payments of an entity during a period. A **secondary purpose** is to provide information about operating, investing, and financing activities.

c. The statement of cash flows classifies cash receipts and disbursements into one of **three categories**. The proper classification can be generalized as follows:

Statement of Cash Flows	Source
Operating activities	Income statement
Investing activities	Investment securities and noncurrent assets
Financing activities	Noncurrent liabilities and equity

2. **Operating activities** include the effects of transactions involved in the determination of net income.

   a. These typically include

      1) Cash receipts from the delivery of goods or the performance of services.
      2) Cash payments to suppliers for inventory, employees for wages, and governments for taxes.
      3) Also included are cash receipts from interest and dividends on investments and cash payments of interest on loans to others (e.g., trade credit extended, bondholders).

         a) Even though these are investing activities, their cash effects are included in operating activities because they go into the calculation of net income.

   b. The FASB prescribes **two approaches** to presenting cash flows from **operating activities**, the direct method and the indirect method. The two methods always produce the same net figure.

      1) The **direct method** lists the separate categories of gross cash receipts and disbursements and reports net cash flow as the difference between them.
      2) The **indirect method** (also called the reconciliation method) begins with GAAP-based net income or the change in net assets and removes items that did not affect operating cash flow.
      3) The FASB expresses a **preference for the direct method**. However, if the direct method is used, a separate reconciliation based on the indirect method must be provided in a separate schedule. For this reason, **most firms simply employ the indirect method** on the face of the statement.

DIRECT METHOD

Cash flows from operating activities:		
Cash receipts from:		
Customers	$XX,XXX	
Sale of trading securities	XX,XXX	
Interest earned	XX,XXX	
Dividends on equity investments	XX,XXX	
Other operating cash receipts	XX,XXX	
Net cash inflows		**$XXX,XXX**
Cash disbursements for:		
Inventory	$XX,XXX	
Purchase of trading securities	XX,XXX	
Salaries and wages	XX,XXX	
Interest expense	XX,XXX	
Taxes	XX,XXX	
Other operating cash payments	XX,XXX	
Net cash outflows		**(XXX,XXX)**
Net cash provided by operating activities		**$ X,XXX**

INDIRECT METHOD

Cash flows from operating activities:		
Accrual-basis net income		**$XX,XXX**
Additions:		
Decrease in receivables	$X,XXX	
Decrease in inventories	X,XXX	
Increase in payables	X,XXX	
Depreciation expense	X,XXX	
Amortization of bond discount	X,XXX	
Loss on sale of plant assets	X,XXX	
Loss on investment in equity-method investees	X,XXX	
Net additions		**XX,XXX**
Subtractions:		
Increase in receivables	$X,XXX	
Increase in inventories	X,XXX	
Decrease in payables	X,XXX	
Amortization of bond premium	X,XXX	
Gain on sale of plant assets	X,XXX	
Income from investment in equity-method investees	X,XXX	
Net subtractions		**(XX,XXX)**
Net cash provided by operating activities		**$ X,XXX**

3. **Investing activities** include the effects of transactions involving long-lived assets. These typically include
   a. The purchase and sale of securities of other entities (that are not held for active trading)
   b. The purchase and sale of property, plant, and equipment
   c. The granting and repayment of principal on loans made to other entities

Cash flows from investing activities:		
Purchase of land	$(XX,XXX)	
Purchase of building	(XX,XXX)	
Sale of equipment	XX,XXX	
Purchase of available-for-sale securities	(XX,XXX)	
Sale of held-to-maturity securities	XX,XXX	
Proceeds from note receivable	XX,XXX	
Net cash used in investing activities		**$(X,XXX)**

4. **Financing activities** include the effects of transactions involving liabilities and owners' equity. These typically include
   a. Cash receipts from the sale of bonds and the issuance of stock
   b. Cash payments to bondholders for the retirement of debt and to stockholders as dividends (the payment of interest to bondholders is generally classified as an operating activity)

Cash flows from financing activities:		
Issuance of equity securities	$X,XXX,XXX	
Retirement of bonds payable	(XXX,XXX)	
Payment of dividends	(XX,XXX)	
Net cash provided by financing activities		**$XXX,XXX**

5. Next, the **net change in cash** for the year is calculated by adding the three subtotals arrived at above.
   a. This is the starting point for a reconciliation of the beginning balance of cash to the ending balance.

Net increase in cash	**$XXX,XXX**
Cash as of January 1, Year 8	XX,XXX
Cash as of December 31, Year 8	**$XXX,XXX**

6. The final section of the statement of cash flows consists of investing and financing items that affect reported assets and liabilities but that have **no effect on cash flow**.
   a. These include such items as
      1) Conversions of debt to equity
      2) Assets obtained by assuming liabilities or entering into lease agreements
      3) Capital assets received as gifts
      4) Exchange of a noncash asset or liability for another
   b. Since these items cannot be incorporated into the body of the statement, they are disclosed in a separate section, as shown below:

Summary of noncash investing and financing activities:
Converted $500,000 bonds payable into 2,000,000 shares $1 par value common stock
Obtained equipment in exchange for $60,000 note payable

1.5 COMMON-SIZE FINANCIAL STATEMENTS

1. Analyzing the financial statements of steadily growing firms and firms of different sizes within an industry presents certain difficulties.

   a. To overcome this obstacle, **common-size statements** restate financial statement line items in terms of a percentage of a given amount, such as total assets for a balance sheet or net sales for an income statement.

      1) Items on **common-size financial statements** are expressed as percentages of net sales (on the income statement) or total assets (on the balance sheet). The base amount is assigned the value of 100%.

      2) Thus, on an income statement, net sales is valued at 100%, while all other amounts are a percentage of net sales. On the balance sheet, total assets are 100%, as is the total of liabilities and shareholders' equity. Each line item can be interpreted in terms of its proportion of the baseline figure.

         a) EXAMPLES:

Income statement
GAAP-based format

	Current Year	Prior Year
Net sales	**$1,800,000**	**$1,400,000**
Cost of goods sold	(1,650,000)	(1,330,000)
Gross profit	**150,000**	**70,000**
Selling expenses	(50,000)	(15,000)
General and admin. expenses	(15,000)	(10,000)
Operating income	**85,000**	**45,000**
Other revenues and gains	20,000	0
Other expenses and losses	(35,000)	(10,000)
Income before taxes	**70,000**	**35,000**
Income taxes (40%)	(28,000)	(14,000)
Net income	**$ 42,000**	**$ 21,000**

Income statement
Common-size format

	Current Year	Prior Year
Net sales	**100.0%**	**100.0%**
Cost of goods sold	(91.7%)	(95.0%)
Gross profit	**8.3%**	**5.0%**
Selling expenses	(2.8%)	(1.1%)
General and admin. expenses	(0.8%)	(0.7%)
Operating income	**4.7%**	**3.2%**
Other revenues and gains	1.1%	0.0%
Other expenses and losses	(1.9%)	(0.7%)
Income before taxes	**3.9%**	**2.5%**
Income taxes (40%)	(1.6%)	(1.0%)
Net income	**2.3%**	**1.5%**

Balance sheet
GAAP-based format

Assets:	Current Year End	Prior Year End
Current assets	$ 760,000	$ 635,000
Noncurrent assets	1,040,000	965,000
Total assets	**$1,800,000**	**$1,600,000**
Liabilities and stockholders' equity:		
Current liabilities	$ 390,000	$ 275,000
Noncurrent liabilities	610,000	675,000
Total liabilities	$1,000,000	$ 950,000
Stockholders' equity	800,000	650,000
Total liabilities and stockholders' equity	**$1,800,000**	**$1,600,000**

Balance sheet
Common-size format

Assets:	Current Year End	Prior Year End
Current assets	42.2%	39.7%
Noncurrent assets	57.8%	60.3%
Total assets	**100.0%**	**100.0%**
Liabilities and stockholders' equity:		
Current liabilities	21.7%	17.2%
Noncurrent liabilities	33.9%	42.2%
Total liabilities	55.6%	59.4%
Stockholders' equity	44.4%	40.6%
Total liabilities and stockholders' equity	**100.0%**	**100.0%**

2. Preparing common-size statements makes it easier to analyze differences among companies of various sizes or comparisons between a similar company and an industry average.

   a. For example, comparing the efficiency of a company with $1,800,000 of revenues to a company with $44 billion in revenues is difficult unless the numbers are reduced to a common denominator.

3. The common-size statements on the previous page are an example of **vertical analysis** (i.e., the percentages are based on numbers above or below in the same column).
   a. Alternatively, there is a concept known as **horizontal analysis** wherein the amounts for several periods are stated in percentages of a base-year amount. These are often called **trend percentages**.
   b. One period is designated the base period, to which the other periods are compared. Each line item of the base period is thus 100%.
      1) EXAMPLE:

Income statement
GAAP-based format

	Current Year	Prior Year	2nd Prior Year
Net sales	**$1,800,000**	**$1,400,000**	**$1,500,000**
Cost of goods sold	(1,650,000)	(1,330,000)	(1,390,000)
Gross profit	**$ 150,000**	**$ 70,000**	**$ 110,000**

Income statement
Trend analysis

	Current Year	Prior Year	2nd Prior Year
Net sales	120.0%	93.3%	100.0%
Cost of goods sold	118.7%	95.7%	100.0%
Gross profit	**136.4%**	**63.6%**	**100.0%**

      2) Even though sales and cost of goods sold declined only slightly from the base year to the next year, gross profit plunged (on a percentage basis). By the same token, when sales recovered in the current year, the gain in gross profit was (proportionally) greater than the increases in its two components.

4. There is also a form of horizontal analysis that does not use common sizes. This method is used to calculate the growth (or decline) of key financial line items.
   a. For example, if a company's sales increased from $100,000 to $120,000, there would be a third column showing the percentage increase, which in this case was 20%.
   b. This is another form of **management by exception**. Managers can look at the third column (the percentage change column) and see which accounts have experienced the most change since the previous period.

1.6 CORE CONCEPTS

Basic Financial Statements and Their Users

- The **elements** of one statement **articulate** (are interrelated) with those of other statements.
- The balance sheet reports assets, liabilities, equity, and investments by owners **at a moment in time**.
- The statement of income and statement of retained earnings report revenues, expenses, gains, losses, and distributions to owners **over a period of time**.
- The elements of the **balance sheet** are **changed by** those on the **income statement** and are their cumulative result.

Statement of Financial Position

- The statement of financial position (balance sheet) “provides information about an entity’s **assets, liabilities, and equity** and their relationships to each other at a moment in time.”
- The items in the balance sheet represent the **resources** of the entity and **claims** to those resources.

Statement of Income and Statement of Retained Earnings

- The items in the statements of income and retained earnings represent the **effects of transactions** and other events and circumstances that result in changes in the entity’s resources and claims to those resources.
- The statement of income can be presented in the **single-step**, **multi-step**, or **condensed** format.
- The results of **discontinued operations** and the effects of **extraordinary items** are presented **separately** after income from continuing operations.

Statement of Cash Flows

- The primary purpose of a statement of cash flows is to provide relevant information about the **cash receipts and payments** of an entity during a period.
- Cash flows are classified as being from **operating** activities, **investing** activities, or **financing** activities.
- Cash flows from **operating activities** can be displayed using the **direct method** (income statement approach) or the **indirect method** (reconciliation approach).
- If the **direct method** is used for reporting operating activities, a **reconciliation** that mimics the indirect method **must be disclosed**.
- The **net change in cash** for the year is calculated by adding the cash flows provided by/used in operating, investing, and financing activities. This is the starting point for a reconciliation of the beginning balance of cash to the ending balance.
- The final section of the statement of cash flows consists of investing and financing items that affect reported assets and liabilities but that have **no effect on cash flow** (the summary of noncash investing and financing activities).

Common-Size Financial Statements

- **Common-size statements** restate financial statement line items in terms of a percentage of a given amount, such as total assets for a balance sheet or net sales for an income statement. Items on common-size financial statements are expressed as percentages of net sales (on the income statement) or total assets (on the balance sheet).
- In **horizontal analysis**, the amounts for several periods are stated in percentages of a base-year amount. These are often called trend percentages. Another form of horizontal analysis does not use common sizes. This method is used to calculate the growth (or decline) of key financial line items.