

***Using Financial Accounting Information The
Alternative to Debits and Credits 10th edition Porter
Solutions Manual***

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CHAPTER 2

Financial Statements and the Annual Report

OVERVIEW OF EXERCISES, PROBLEMS, AND CASES

Learning Outcomes	Exercises	Estimated Time in Minutes	Level
Module 1			
1. Describe the objectives of financial reporting.			
2. Describe the qualitative characteristics of accounting information.	1	10	Easy
Module 2			
3. Explain the concept and purpose of a classified balance sheet and prepare the statement.	2	10	Mod
	3	10	Easy
	5	10	Easy
	12*	10	Mod
4. Use a classified balance sheet to analyze a company's financial position.	4	10	Easy
Module 3			
5. Explain the difference between a single-step and a multiple-step income statement and prepare each type of income statement.	6	10	Easy
	7	10	Mod
	12*	10	Mod
	13*	15	Mod
	14*	5	Easy
6. Use a multiple-step income statement to analyze a company's operations.	8	10	Easy
	13*	15	Mod
	14*	5	Easy
7. Identify the components of the statement of retained earnings and prepare the statement.	9	10	Mod
	12*	10	Mod
8. Identify the components of the statement of cash flows and prepare the statement.	10	10	Easy
Module 4			
9. Read and use the financial statements and other elements in the annual report of a publicly held company.	11	20	Diff

*Exercise, problem, or case covers two or more learning outcomes
 Level = Difficulty levels: Easy; Moderate (Mod); Difficult (Diff)

Learning Outcomes	Problems and Alternates	Estimated Time in Minutes	Level
Module 1			
1. Describe the objectives of financial reporting.	12*	45	Diff
2. Describe the qualitative characteristics of accounting information.	1	15	Diff
	2	15	Mod
	10*	35	Mod
	11*	20	Mod
Module 2			
3. Explain the concept and purpose of a classified balance sheet and prepare the statement.	3	50	Mod
4. Use a classified balance sheet to analyze a company's financial position.	4	20	Easy
	5	15	Mod
	10*	35	Mod
	12*	45	Diff
Module 3			
5. Explain the difference between a single-step and a multiple-step income statement and prepare each type of income statement.	6	30	Mod
	7	45	Mod
	11*	20	Mod
6. Use a multiple-step income statement to analyze a company's operations.			
7. Identify the components of the statement of retained earnings and prepare the statement.			
8. Identify the components of the statement of cash flows and prepare the statement.	8	30	Mod
	12*	45	Diff
Module 4			
9. Read and use the financial statements and other elements in the annual report of a publicly held company.	9	30	Diff

*Exercise, problem, or case covers two or more learning outcomes
 Level = Difficulty levels: Easy; Moderate (Mod); Difficult (Diff)

Learning Outcomes	Cases	Estimated Time in Minutes	Level
Module 1			
1. Describe the objectives of financial reporting.			
2. Describe the qualitative characteristics of accounting information.	5	30	Mod
Module 2			
3. Explain the concept and purpose of a classified balance sheet and prepare the statement.			
4. Use a classified balance sheet to analyze a company's financial position.	1	30	Mod
	2	20	Mod
	6*	30	Mod
Module 3			
5. Explain the difference between a single-step and a multiple-step income statement and prepare each type of income statement.			
6. Use a multiple-step income statement to analyze a company's operations.	6*	30	Mod
7. Identify the components of the statement of retained earnings and prepare the statement.			
8. Identify the components of the statement of cash flows and prepare the statement.	3	25	Mod
Module 4			
9. Read and use the financial statements and other elements in the annual report of a publicly held company.	4	20	Mod

*Exercise, problem, or case covers two or more learning outcomes
 Level = Difficulty levels: Easy; Moderate (Mod); Difficult (Diff)

EXERCISES

LO 2

EXERCISE 2-1 CHARACTERISTICS OF USEFUL ACCOUNTING INFORMATION

- | | |
|----------------------------|----------------------|
| 1. materiality | 4. consistency |
| 2. relevance | 5. understandability |
| 3. faithful representation | 6. comparability |

LO 3

EXERCISE 2-2 THE OPERATING CYCLE

- For a company that sells a product, the operating cycle begins when the cash is invested in inventory and ends when cash is collected by the company from its customers. Two Wheeler's operating cycle would be a minimum of 45 days (for cash sales) and a maximum of 75 days (for sales on credit: 45 days to sell the bike and 30 days to collect).
- The operating cycle for Baxter, the manufacturer of the bikes, would normally be longer than Two Wheeler's. This is because a manufacturer incurs various costs to produce the bikes before it sells them to retailers such as Two Wheeler and eventually collects cash from the sales. On the other hand, the retailer only buys a finished good from the manufacturer and then sells it to the customer.

LO 3

EXERCISE 2-3 CLASSIFICATION OF FINANCIAL STATEMENT ITEMS

- | | |
|--------|---------|
| 1. CA | 6. NCA |
| 2. SE | 7. CL |
| 3. NCA | 8. SE |
| 4. CA | 9. CA |
| 5. CL | 10. LTL |

LO 4**EXERCISE 2-4 CURRENT RATIO****1. Current Ratio = Current Assets/Current Liabilities**

December 31, 2016:

$$\begin{aligned}\text{Current Ratio} &= (\$6,000 + \$10,000 + \$8,000)/(\$7,000 + \$1,000 + \$4,000) \\ &= \$24,000/\$12,000 \\ &= \underline{2.0} \text{ to } 1\end{aligned}$$

December 31, 2017:

$$\begin{aligned}\text{Current Ratio} &= (\$3,000 + \$15,000 + \$12,000)/(\$12,000 + \$2,000 + \$6,000) \\ &= \$30,000/\$20,000 \\ &= \underline{1.5} \text{ to } 1\end{aligned}$$

2. Baldwin's current ratio decreased from 2.0 at the end of 2016 to 1.5 at the end of 2017. In general, the higher the current ratio, the more liquid the company.
3. Cash decreased by 50%, from \$6,000 to \$3,000, and accounts receivable increased by 50%, from \$10,000 to \$15,000. Inventory also increased by 50%, from \$8,000 to \$12,000. Not only did Baldwin's current ratio decrease, but its current assets are also less liquid at the end of the year, with more invested in receivables and inventory and less in cash.

LO 3**EXERCISE 2-5 CLASSIFICATION OF ASSETS AND LIABILITIES**

- | | | |
|-------|--------|--------|
| 1. CA | 4. NCA | 7. CA |
| 2. CL | 5. CL | 8. LTL |
| 3. CA | 6. CL | 9. NCA |

LO 5**EXERCISE 2-6 SELLING EXPENSES AND GENERAL AND ADMINISTRATIVE EXPENSES**

1. Advertising expense—S
2. Depreciation expense—store furniture and fixtures—S
3. Office rent expense—G&A
4. Office salaries expense—G&A
5. Store rent expense—S
6. Store salaries expense—S
7. Insurance expense—G&A*
8. Supplies expense—G&A*
9. Utilities expense—G&A*

*Each of these could be classified as a selling expense if the cost is related in some way to the sales function; e.g., insurance on cars driven by salespeople could be classified as a selling expense.

LO 5**EXERCISE 2-7 MISSING INCOME STATEMENT AMOUNTS**

	Sara's Coffee Shop	Amy's Deli	Jane's Bagels
Net sales	\$35,000	(3) \$63,000	\$78,000
Cost of goods sold	(1) 28,000	45,000	(7) 39,000
Gross profit	7,000	18,000	(6) 39,000
Selling expenses	3,000	(4) 6,000	9,000
General and administrative expenses	1,500	2,800	(5) 4,600
Total operating expenses	(2) 4,500	8,800	13,600
Net income	\$ 2,500	\$ 9,200	\$25,400

Solved as follows (in the order listed):

- (1) $\$35,000 - \$7,000 = \$28,000$
- (2) $\$3,000 + \$1,500 = \$4,500$
- (3) $\$45,000 + \$18,000 = \$63,000$
- (4) $\$8,800 - \$2,800 = \$6,000$
- (5) $\$13,600 - \$9,000 = \$4,600$
- (6) $\$25,400 + \$13,600 = \$39,000$
- (7) $\$78,000 - \$39,000 = \$39,000$

LO 6**EXERCISE 2-8 INCOME STATEMENT RATIO****Profit margin:**

$$\text{Net Income/Revenues} = \$45,000 / \$134,800 = \underline{33.4\%}$$

$$*\$134,800 - \$38,310 - \$36,990 - \$580 - \$13,920 = \$45,000$$

A profit margin of 33% indicates that for every dollar of sales, Holly Enterprises has \$0.33 in net income. It would be beneficial to compare the company's profit margin with some of its competitors and with previous years.

LO 7**EXERCISE 2-9 STATEMENT OF RETAINED EARNINGS**

LANDON CORPORATION
STATEMENT OF RETAINED EARNINGS
FOR THE YEAR ENDED DECEMBER 31, 2017

Retained earnings, January 1, 2017.....			\$130,520*
Net income for 2017			145,480
Dividends declared and paid			<u>(40,000)</u>
Retained earnings, December 31, 2017.....			<u>\$236,000</u>
*Retained earnings, January 2, 2015.....			\$ 0
Net income:			
2015	\$ 85,200		
2016	<u>125,320</u>	210,520	
Dividends:			
2015	\$ (40,000)		
2016	<u>(40,000)</u>	<u>(80,000)</u>	
Retained earnings, December 31, 2016			<u>\$130,520</u>

LO 8**EXERCISE 2-10 COMPONENTS OF THE STATEMENT OF CASH FLOWS**

1. Paid for supplies—O
2. Collected cash from customers—O
3. Purchased land (held for resale)—O
4. Purchased land (for construction of new building)—I
5. Paid dividend—F
6. Issued stock—F
7. Purchased computers (for use in the business)—I
8. Sold old equipment—I

LO 9

EXERCISE 2-11 BASIC ELEMENTS OF FINANCIAL REPORTS

1. **Management discussion and analysis**—The information in this section of the annual report is prepared by management and is management's opportunity to explain various items that appear in the financial statements. Increases and decreases in various items are highlighted and reasons for these changes are given. The information in this section is not subject to any outside review or support. Users must rely on the integrity of management that the information contained in the report is reliable.
2. **Product/markets of company**—Management provides information in the annual report about the company's products and markets. The detail provided by management differs widely among companies, but most companies describe their various products and often show pictures of them. The distribution system for the products, i.e., whom the company sells to, is also described. Because the company's products and markets are a matter of public knowledge, they are subject to verification.
3. **Financial statements**—These are the responsibility of management and are normally prepared by the controller. They include the income statement, balance sheet, statement of changes in stockholders' equity, and statement of cash flows. The information provided in the financial statements is subject to verification as part of the external audit.
4. **Notes to financial statements**—These are also the responsibility of management, and they include detailed explanations about the various items appearing in the financial statements. One of the first notes in most annual reports is a summary of the significant accounting policies, such as the company's inventory valuation methods and depreciation methods. The information included in the notes is subject to review by the independent auditors and is therefore highly verifiable.
5. **Independent accountants' report**—As the name implies, this report is prepared by the independent auditors. It includes information about the scope of the audit (the statements included in the audit), the auditing standards followed in conducting the audit, and an opinion as to the fairness of presentation of the financial statements. Because the public relies on the auditors to render an impartial opinion, the auditing profession is subject to a set of high ethical standards in performing audits.

MULTI-CONCEPT EXERCISES**LO 3,5,7****EXERCISE 2-12 FINANCIAL STATEMENT CLASSIFICATION**

BS = Balance sheet; IS = Income statement; RE = Retained earnings statement

- | | |
|----------------------------|---------------------------------------|
| 1. Accounts payable—BS | 11. Land held for future expansion—BS |
| 2. Accounts receivable—BS | 12. Loan payable—BS |
| 3. Advertising expense—IS | 13. Office supplies—BS |
| 4. Bad debt expense—IS | 14. Patent—BS |
| 5. Bonds payable—BS | 15. Patent amortization expense—IS |
| 6. Buildings—BS | 16. Prepaid insurance—BS |
| 7. Cash—BS | 17. Retained earnings—BS and RE |
| 8. Common stock—BS | 18. Sales—IS |
| 9. Depreciation expense—IS | 19. Utilities expense—IS |
| 10. Dividends—RE | 20. Wages payable—BS |

LO 5,6**EXERCISE 2-13 SINGLE- AND MULTIPLE-STEP INCOME STATEMENT**

- | | |
|------------------------------|----------------------------------|
| 1. Sales—B | 7. Net income—B |
| 2. Cost of goods sold—B | 8. Supplies on hand—N |
| 3. Selling expenses—M* | 9. Accumulated depreciation—N |
| 4. Total revenues—S | 10. Income before income taxes—M |
| 5. Utilities expense—B | 11. Gross profit—M |
| 6. Administrative expense—M* | |

*This assumes that selling and administrative expenses are each headings for a group of expenses. If this is the case, they would appear only on a multiple-step income statement.

LO 5,6**EXERCISE 2-14 MULTIPLE-STEP INCOME STATEMENT****Profit margin:**

$$\text{Net Income/Sales} = \$614,200^*/\$1,200,000 = \underline{51.2\%}$$

$$*\$1,200,000 - \$450,000 - \$60,800 - \$75,000 = \$614,200^*$$

Sales	\$1,200,000
Cost of sales	<u>450,000</u>
Gross profit	\$ 750,000
Total operating expenses	<u>135,800**</u>
Net income	<u>\$ 614,200*</u>

**Total Operating Expenses = Selling Expenses (\$60,800) + General and Administrative Expenses (\$75,000) = \$135,800

Gaynor Corporation has been very profitable on the basis of its very high profit margin of 51.2%. Before making an investment, however, you would want to consider how this ratio compares with that of prior years and with that of other companies in the same line of business.

PROBLEMS**LO 2****PROBLEM 2-1 MATERIALITY**

1. Among the questions that might be answered by the analysis that was performed are these: Is the usage of any of the items cyclical? Is there a relationship between the usage of any two or more of the items? Is the amount being spent on these items material? Would it be feasible to set up an account at an office supply store for some of these items if they are used in large quantities? From this analysis, the company might decide to change the timing of its ordering to correspond to its need.
2. This question deals with the concept of materiality. It is likely this information would be more relevant for a real estate company than for a hardware store. Normally, a realtor would use more office supplies, relative to its use of other types of supplies, and thus the amount spent on office supplies would be more material to it than to a hardware store.

LO 2**PROBLEM 2-2 COSTS AND EXPENSES**

1. **Display fixtures in a retail store**—Only a portion of the cost would appear in the period of acquisition; the fixtures should be depreciated over their useful lives.
2. **Advertising**—All.
3. **Merchandise for sale**—Only the cost of the merchandise sold during the current period would appear on the income statement; the remainder would appear as an asset on the balance sheet.
4. **Incorporation**—Because of the difficulty in determining the period over which benefits will be received from the costs necessary to incorporate, accounting standards require that these costs be expensed as incurred.
5. **Cost of a franchise**—This is a cost that should benefit several future periods, and only a portion should be expensed in the current period; the cost of the franchise should be treated as an intangible asset and amortized over the periods during which benefits are expected.
6. **Office supplies**—The portion of the supplies used should be recognized as an expense in the current period; the unused portion should be reported as a current asset.
7. **Wages and salaries**—All.
8. **Computer software**—Assuming that the software was purchased, an intangible asset should be recognized and a portion of the cost recognized as expense in each of the periods benefited.
9. **Computer hardware**—Only the portion of the cost associated with the benefits provided during the current period would be recognized as depreciation expense; the cost should be written off over the useful life of the hardware.

LO 3**PROBLEM 2-3 CLASSIFIED BALANCE SHEET****1. Classified balance sheet:**

**RUTH CORPORATION
BALANCE SHEET
DECEMBER 31, 2017**

Assets

Current assets:

Cash	\$ 13,230
Accounts receivable	23,450
Inventory.....	45,730
Prepaid rent.....	1,500
Office supplies	<u>2,340</u>

Total current assets		\$ 86,250
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Long-term investments		85,000
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Property, plant, and equipment:

Land	\$250,000
Automobiles.....	\$112,500
Accumulated depreciation	<u>22,500</u> 90,000
Buildings.....	\$200,000
Accumulated depreciation	<u>40,000</u> <u>160,000</u>

Total property, plant, and equipment		500,000
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Intangible assets:

Patents	<u>40,000</u>
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Total assets		<u><u>\$711,250</u></u>
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Liabilities

Current liabilities:

Accounts payable	\$ 18,255
Income taxes payable.....	6,200
Interest payable	1,500
Notes payable, due June 30, 2018.....	10,000
Salaries and wages payable.....	<u>4,200</u>

Total current liabilities		\$ 40,155
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Long-term debt:

Bonds payable, due December 31, 2021	<u>160,000</u>
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Total liabilities		\$200,155
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PROBLEM 2-3 (Concluded)**Stockholders' Equity**

Contributed capital:

Capital stock, \$10 par value, 15,000 shares issued and outstanding.....	\$150,000	
Paid-in capital in excess of par value	<u>50,000</u>	
Total contributed capital.....	\$200,000	
Retained earnings.....	<u>311,095</u>	
Total stockholders' equity		<u>511,095</u>
Total liabilities and stockholders' equity		<u>\$711,250</u>

2. Current Ratio = Current Assets/Current Liabilities

$$\$86,250/\$40,155 = \underline{2.15} \text{ to } 1$$

3. From the current ratio alone, Ruth appears to be relatively liquid. To fully assess its liquidity, however, it would be useful to look more specifically at the composition of the current assets and liabilities. How long does it take to sell inventory? How long does it take to collect an account receivable? Also, you would want to compare Ruth's current ratio at the end of this period with those of prior periods and with the current ratio for companies in the same industry.

LO 4**PROBLEM 2-4 FINANCIAL STATEMENT RATIOS****1. a. Working capital at 12/31/17:**

$$\text{Current assets: } \$27,830 + \$20,200 + \$450 + \$24,600 + \$6,250 + \$3,600 = \underline{\$82,930}$$

$$\text{Current liabilities: } \$8,400 + \$1,450 + \$1,200 = \underline{\$11,050}$$

$$\text{Working capital: } \$82,930 - \$11,050 = \underline{\$71,880}$$

Working capital at 12/31/16:

$$\text{Current assets: } \$35,770 + \$19,450 + \$700 + \$26,200 + \$5,020 + \$4,800 = \underline{\$91,940}$$

$$\text{Current liabilities: } \$5,200 + \$1,200 + \$12,000 + \$1,230 + \$1,600 = \underline{\$21,230}$$

$$\text{Working capital: } \$91,940 - \$21,230 = \underline{\$70,710}$$

b. Current ratio at 12/31/17:

$$\$82,930/\$11,050 = \underline{7.50} \text{ to } 1$$

Current ratio at 12/31/16:

$$\$91,940/\$21,230 = \underline{4.33} \text{ to } 1$$

PROBLEM 2-4 (Concluded)

2. Both the absolute liquidity position of the company and the relative liquidity position of the company have improved during 2017. First, the absolute position, as indicated by the amount of working capital, has improved from \$70,710 to \$71,880. The liquidity of the company has also improved on a relative basis, as indicated by the increase in the current ratio from 4.33 to 7.50. The primary reason for the improvement in the company's liquidity is the repayment during the year of the \$12,000 note payable, along with the \$1,200 of interest payable on the note. This is counter-balanced somewhat, though, by the decrease in accounts receivable from \$35,770 to \$27,830.

LO 4**PROBLEM 2-5 WORKING CAPITAL AND CURRENT RATIO**

1. Current Ratio = Current Assets/Current Liabilities

$$= (\$23,000 + \$13,000 + \$45,000 + \$800)/(\$54,900 + \$1,200)$$

$$= \$81,800/\$56,100 = \underline{1.46} \text{ to } 1$$

Working Capital = Current Assets – Current Liabilities

$$= \$81,800 - \$56,100 = \underline{\$25,700}$$
2. One concern is the relatively large percentage of the current assets tied up in inventory. This asset accounts for \$45,000/\$81,800, or 55% of the total current assets. What is the normal period of time it takes to sell inventory? Is any part of the inventory slow moving or obsolete?
3. On the basis of the current ratio alone, Stevenson appears to be relatively liquid, although it would be important to compare the ratio with those of prior years and with those of other companies in the same industry.

LO 5**PROBLEM 2-6 SINGLE-STEP INCOME STATEMENT**

1. Single-step income statement:

**SHAW CORPORATION
INCOME STATEMENT
FOR THE CURRENT YEAR**

Revenues:		
Sales	\$48,300	
Interest	1,340	
Rent.....	<u>6,700</u>	
Total revenues		\$56,340
Expenses:		
Advertising.....	\$ 1,500	
Commissions	2,415	
Cost of goods sold.....	29,200	
Depreciation—office building.....	2,900	
Income tax.....	1,540	
Insurance—salesperson's auto	2,250	
Interest	1,400	
Salaries and wages—office	12,560	
Supplies—office.....	<u>890</u>	
Total expenses.....		<u>54,655</u>
Net income.....		<u>\$ 1,685</u>

2. A single-step income statement does not lend itself as readily to analysis as does a multiple-step statement. The lack of any grouping of the various expenses makes any type of analysis more difficult.

LO 5**PROBLEM 2-7 MULTIPLE-STEP INCOME STATEMENT AND PROFIT MARGIN****1. Multiple-step income statement:**

**SHAW CORPORATION
INCOME STATEMENT
FOR THE CURRENT YEAR**

Sales.....	\$48,300	
Cost of goods sold	<u>29,200</u>	
Gross profit		\$ 19,100
Operating expenses:		
Selling expenses:		
Advertising	\$ 1,500	
Commissions.....	2,415	
Insurance—salesperson's auto	<u>2,250</u>	
Total selling expenses	\$ 6,165	
General and administrative expenses:		
Depreciation—office building.....	\$ 2,900	
Salaries and wages—office.....	12,560	
Supplies—office	<u>890</u>	
Total general and administrative expenses	<u>16,350</u>	
Total operating expenses.....		<u>22,515</u>
Loss from operations		\$ (3,415)
Other revenues and expenses:		
Interest expense	\$ 1,400	
Interest revenue.....	1,340	
Rent revenue	<u>6,700</u>	
Excess of other revenues over other expenses		<u>6,640</u>
Income before taxes		\$ 3,225
Income tax expense		<u>1,540</u>
Net income.....		<u>\$ 1,685</u>

2. The main advantages of the multiple-step income statement are the groupings of various items and the provision of important subtotals such as income from operations.
3. Profit Margin = Net Income/Sales
= \$1,685/\$48,300 = 3.5%
4. A profit margin of 3.5% means that for every dollar of sales the company has net income of \$0.035. This would appear to be a reasonable profit margin, but it would be important to compare the profit margin with prior years and with other companies in the same industry.

LO 8**PROBLEM 2-8 STATEMENT OF CASH FLOWS****1.**

**COLORADO CORPORATION
STATEMENT OF CASH FLOWS
FOR THE FIRST YEAR**

Cash flows from operating activities:		
Cash collected from customers	\$ 93,970	
Cash paid for inventory.....	(65,600)	
Cash paid in salaries and wages	(20,400)	
Cash paid in taxes	<u>(3,100)</u>	
Net cash provided by operating activities.....		\$ 4,870
Cash flows from investing activities:		
Payment on office building.....		(210,000)
Cash flows from financing activities:		
Proceeds from issuance of stock.....	\$250,000	
Proceeds from long-term note	60,000	
Dividends declared and paid	<u>(5,600)</u>	
Net cash provided by financing activities		<u>304,400</u>
Net increase in cash		\$ 99,270
Cash at beginning of year		<u>0</u>
Cash at end of year.....		<u>\$ 99,270</u>

Note: Colorado should report one significant noncash activity as supplementary information to its statement of cash flows: the three-year, \$90,000 note signed to finance the purchase of the office building.

2. First, the statement of cash flows reports on operations on a cash basis, as opposed to the income statement which is prepared on an accrual basis. Second, investing and financing activities are also reported on a statement of cash flows. For example, information about dividends paid during the year is shown on a statement of cash flows but not on an income statement. It is interesting to note that Colorado paid more in dividends, \$5,600, than the amount of cash it generated from operations, \$4,870.

LO 9**PROBLEM 2-9 BASIC ELEMENTS OF FINANCIAL REPORTS**

Letter from the President to Stockholders of Grammar Inc.:

On the surface, 2017 does not appear to have been a successful year for Grammar Inc. One specific event, however, caused the net loss we experienced for the year. Operating income was \$380,000 in 2017; however, the sale of a subsidiary at a loss of \$400,000 resulted in a net loss for the year of \$20,000. The sale of this unprofitable unit of the business should allow us to concentrate our attention in the future on our successful businesses and clear the way for a return to overall profitability in 2018.

I should point out to you that aside from the loss experienced on the sale of the subsidiary, 2017 was a very good year. We were able to control our operating expenses, as operating income as a percentage of sales increased from 20% to 38%. These are clear signals that Grammar is moving in the right direction and should have a solid year of operations in 2018.

MULTI-CONCEPT PROBLEMS
LO 2,4**PROBLEM 2-10 MAKING BUSINESS DECISIONS: LOANING MONEY TO THE COCA-COLA COMPANY****Part A. Ratio Decision Model**

1. Formulate the Question:
Is The Coca-Cola Company liquid enough to pay its obligations as they come due?
2. Gather the Information from the Financial Statements:
Current assets: From the balance sheet
Current liabilities: From the balance sheet

3. Calculate the Ratio:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The Coca-Cola Company (in millions of dollars at December 31, 2015):

Current Assets: \$7,309 + \$8,322 + \$4,269 + \$3,941 + \$2,902 + \$2,752 + \$3,900 = \$33,395

Current Liabilities: \$9,660 + \$13,129 + \$2,677 + \$331 + \$1,133 = \$26,930

$$\text{Current Ratio} = \frac{\$33,395}{\$26,930} = 1.24 \text{ to } 1$$

PROBLEM 2-10 (Continued)**4. Compare the Ratio with Other Ratios:**

Current Ratio			
The Coca-Cola Company		PepsiCo	
December 31, 2015	December 31, 2014	December 26, 2015	December 27, 2014
1.24 to 1	1.02 to 1	1.31 to 1	1.14 to 1

Calculations:

The Coca-Cola Company at December 31, 2014:

$$(\$8,958 + \$9,052 + \$3,665 + \$4,466 + \$3,100 + \$3,066 + \$679) / (\$9,234 + \$19,130 + \$3,552 + \$400 + \$58) = \$32,986 / \$32,374 = 1.02 \text{ to } 1$$

PepsiCo at December 26, 2015:

$$(\$9,096 + \$2,913 + \$6,437 + \$2,720 + \$1,865) / (\$4,071 + \$13,507) = \$23,031 / \$17,578 = 1.31 \text{ to } 1$$

PepsiCo at December 27, 2014:

$$(\$6,134 + \$2,592 + \$6,651 + \$3,143 + \$2,143) / (\$5,076 + \$13,016) = \$20,663 / \$18,092 = 1.14 \text{ to } 1$$

5. Interpret the Ratios:

The Coca-Cola Company's current ratio is higher at the end of 2015 compared to the end of 2014, 1.24 compared to 1.02. Similarly, PepsiCo's current ratio increased from one year to the next, 1.31 compared to 1.14. On the basis of the current ratios alone, the two companies are similar in terms of liquidity at the end of 2015.

The composition of a company's current assets adds another level to the analysis of liquidity. The Coca-Cola Company's cash and cash equivalents, the most liquid of assets, make up 22% of its current assets at the end of 2015. PepsiCo's cash and cash equivalents comprise nearly 40% of its current assets at the end of 2015. On the other hand, Coca-Cola's short-term investments and marketable securities make up 38% of its current assets while PepsiCo's short-term investments comprise 13% of its current assets. PepsiCo's accounts and notes receivable, also highly liquid, are 28% of current assets, contrasting with The Coca-Cola Company's trade accounts receivable of 12%. Although receivables are considered very liquid, questions may arise about collectibility.

PROBLEM 2-10 (Continued)**Part B. Business Decision Model****1. Formulate the Question:**

After considering all relevant information, should I loan money to The Coca-Cola Company?

2. Gather Information from the Financial Statements and Other Sources:

The information will come from a variety of sources, not limited to but including:

- a. The balance sheet provides information about liquidity.
- b. The income statement provides information about profitability.
- c. The statement of cash flows reports on the company's cash inflows and outflows.
- d. The outlook for the beverage industry, including consumer trends, foreign markets, labor issues, and other factors.
- e. The outlook for the economy during the time the loan would be outstanding.
- f. Projections for interest rates for similar loans during the term of the loan.
- g. Alternative uses for the bank's money.

3. Analyze the Information Gathered:

The information gathered in (2) above must be analyzed. Among the relevant questions that must be answered are the following:

- a. Refer to part (5) of the Ratio Decision Model for a comparison of the current ratios for The Coca-Cola Company and its competitor, PepsiCo, over the last two years. The analysis also needs to consider the composition of the current assets. For example, cash and receivables are more liquid than inventories and prepaid expenses. The company's existing long-term liabilities must also be taken into account.
- b. What has been the trend in profits over recent years? Has the company been able to increase revenues and at the same time control its costs?
- c. How much cash has the company spent in recent years to retire existing debt? What other significant cash outflows have been made?
- d. What is the company's share of the growing market for sports drinks? How significant are revenues from Asian markets?
- e. Is inflation projected to increase during this time? Are labor costs likely to increase?
- f. Are interest rates projected to increase or decrease during the term of the loan?
- g. If a loan is not made to The Coca-Cola Company, what other uses does the bank have for the money?

4. Make the Decision:

Taking into account all of the various sources of information, decide either to loan money to The Coca-Cola Company or find an alternative use for the money.

PROBLEM 2-10 (Concluded)**5. Monitor Your Decision:**

If you decide to make the loan, you will need to monitor it periodically. During the time the loan is outstanding, you will want to assess the company's continuing liquidity as well as other factors you considered before making the loan.

LO 2,5**PROBLEM 2-11 COMPARABILITY AND CONSISTENCY IN INCOME STATEMENTS**

1. The income statement for 2016 is in single-step format, and the 2017 statement uses the multiple-step format.

2.

**GLEESON COMPANY
INCOME STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 2016**

Sales	\$1,500,000
Cost of sales	<u>(450,000)</u>
Gross profit	<u>\$1,050,000</u>
Selling expenses	\$ 593,000*
Administrative expenses	<u>94,000**</u>
Total selling and administrative expenses	<u>\$ 687,000</u>
Net income	<u><u>\$ 363,000</u></u>

*\$398,000 + \$175,000 + \$20,000

**\$54,000 + \$40,000

LO 1,4,8

PROBLEM 2-12 CASH FLOW

Cash available to pay a dividend on December 31, 2018:

Cash balance, September 30, 2018	\$ 5,000
Accounts receivable collections	39,406*
Note receivable due on November 1	10,000
Interest due on November 1: $\$10,000 \times 5\%$	500
Cash paid for purchases	(15,762)**
Mortgage note payments: 3 months $\times \$1,200$	(3,600)
Operating expenses: 3 months $\times \$3,000$	(9,000)
Cash balance, December 31, 2018	<u>\$ 26,544</u>
*September sales collected in October	\$ 12,500
October sales collected in November:	
$\$12,500 \times 1.05$	13,125
November sales collected in December:	
$\$13,125 \times 1.05$	<u>13,781</u>
Total accounts receivable collections	<u>\$ 39,406</u>
**September purchases paid for in October	\$ 5,000
October purchases paid for in November:	
$\$13,125 \times 40\%$	5,250
November purchases paid for in December:	
$\$13,781 \times 40\%$	<u>5,512</u>
Total payments on account	<u>\$ 15,762</u>

Note: Because inventory levels are maintained at \$75,000, purchases are equal to 40% of sales each month.

Conclusion: 50,000 shares of common stock $\times$ \$0.50 per share will require cash of \$25,000 to pay the quarterly dividend. With \$26,544 of cash available, Franklin will barely be able to meet the dividend payment. Unless one or more of the following actions are successful in increasing the cash balance, management should not recommend the normal quarterly dividend of \$0.50 per share:

Reduce inventory levels.

Speed up the collection of receivables.

Lengthen the average amount of time taken to pay for purchases of inventory.

Reduce operating expenses.

ALTERNATE PROBLEMS

LO 2

PROBLEM 2-1A MATERIALITY

1. The pattern of long-distance calls might point to alternative long-distance plans with one of the many carriers now in this business. For example, some companies might give a discount for calls made in off-peak hours. The analysis might point to misuse by certain employees (overuse, personal use, etc.), a situation that could be corrected by talking to the employees who are misusing the long-distance service.
2. This question deals with the concept of materiality. It would be difficult to decide which of the two types of companies, a realtor or a hardware store, would make more long-distance calls relative to its size. A realtor might make a large number of long-distance calls if it deals with out-of-state clients. The hardware store might regularly order inventory from vendors outside of its area code.

LO 2

PROBLEM 2-2A COSTS AND EXPENSES

1. **Point-of-sale systems in a retail store**—The cost associated with these systems is a tangible asset that should be reported in the Long-Term Assets section of the balance sheet and depreciated over the life of the systems; only a portion would be recognized as expense during the current period.
2. **An ad in the yellow pages**—All of the cost for the ad would normally be expensed in the period the cost is incurred unless there was evidence that the ad would provide benefits for a number of future periods.
3. **An inventory-control computer software system**—Assuming that the software was purchased, an intangible asset should be recognized and a portion of the cost recognized as expense in each of the periods benefited.
4. **Shipping merchandise for resale to chain outlets**—All of the costs associated with shipping merchandise for resale would normally be recognized as expense when the costs are incurred. Even though one could argue that under the matching principle these costs should be recognized as expense only when the inventory is sold, the practical difficulty in associating shipping costs with specific items sold results in most companies expensing these costs as incurred.

LO 3**PROBLEM 2-3A CLASSIFIED BALANCE SHEET****1. Classified balance sheet:**

**SINGER COMPANY
BALANCE SHEET
DECEMBER 31, 2017**

Assets

Current assets:

Cash	\$ 60,790	
Marketable securities	15,000	
Accounts receivable	26,700	
Merchandise inventory	112,900	
Prepaid rent	3,600	
Office supplies	<u>400</u>	

Total current assets \$219,390

Property, plant, and equipment:

Land		\$250,000
Buildings	\$150,000	
Accumulated depreciation	<u>40,000</u>	110,000
Equipment	\$ 84,500	
Accumulated depreciation	<u>12,500</u>	<u>72,000</u>

Total property, plant, and equipment 432,000

Intangible assets:

Patents	<u>45,000</u>
---------------	---------------

Total assets \$696,390

Liabilities

Current liabilities:

Accounts payable	\$ 34,280
Income taxes payable	7,500
Interest payable	2,200
Notes payable, due April 15, 2018	6,500
Salaries payable	<u>7,400</u>

Total current liabilities \$ 57,880

Long-term debt:

Bonds payable, due December 31, 2023	<u>250,000</u>
--	----------------

Total liabilities \$307,880

PROBLEM 2-3A (Concluded)**Stockholders' Equity**

Contributed capital:

Capital stock, \$1 par value, 200,000 shares issued and outstanding.....	\$200,000	
Paid-in capital in excess of par value	<u>75,000</u>	
Total contributed capital.....	\$275,000	
Retained earnings.....	<u>113,510</u>	
Total stockholders' equity		<u>388,510</u>
Total liabilities and stockholders' equity		<u>\$696,390</u>

2. Current Ratio = Current Assets/Current Liabilities
 $\$219,390/\$57,880 = \underline{3.79}$ to 1
3. From the current ratio alone, Singer appears to be relatively liquid. In fact, Singer may be too liquid, in that its cash balance is greater than its total current liabilities. Singer may be missing significant investment opportunities by maintaining such a large cash balance. To fully assess its liquidity, it would be useful to look more specifically at the activity in accounts receivable and merchandise inventory. How long does it take to collect an account receivable? How long does it take to sell inventory? Also, you would want to compare Singer's current ratio at the end of this period with prior periods and with the current ratio for companies in the same industry.

LO 4**PROBLEM 2-4A FINANCIAL STATEMENT RATIOS**

1. a. Working capital at 12/31/17:

Current assets: $\$16,500 + \$12,750 + \$200 + \$900 + \$400 = \underline{\$30,750}$ Current liabilities: $\$10,500 + \$1,800 + \$10,000 = \underline{\$22,300}$ Working capital: $\$30,750 - \$22,300 = \underline{\$8,450}$

Working capital at 12/31/16:

Current assets: $\$26,000 + \$11,800 + \$1,100 + \$250 = \underline{\$39,150}$ Current liabilities: $\$6,500 + \$800 + \$5,800 = \underline{\$13,100}$ Working capital: $\$39,150 - \$13,100 = \underline{\$26,050}$

- b. Current ratio at 12/31/17:
 $\$30,750/\$22,300 = \underline{1.38}$ to 1
- Current ratio at 12/31/16:
 $\$39,150/\$13,100 = \underline{2.99}$ to 1

PROBLEM 2-4A (Concluded)

2. Both the absolute liquidity position of the company and the relative liquidity position of the company have declined during 2017. First, the absolute position, as indicated by the amount of working capital, has decreased from \$26,050 to \$8,450. The liquidity of the company has also decreased on a relative basis, as indicated by the decrease in the current ratio from 2.99 to 1.38. The primary reasons for the decline in the company's liquidity are the significant increases in accounts payable and taxes payable and the decrease in accounts receivable.

LO 4**PROBLEM 2-5A WORKING CAPITAL AND CURRENT RATIO**

1. Current Ratio = Current Assets/Current Liabilities

$$= (\$23,000 + \$43,000 + \$75,000 + \$2,800)/(\$84,900 + \$3,200)$$

$$= \$143,800/\$88,100 = \underline{1.63} \text{ to } 1$$

Working Capital = Current Assets – Current Liabilities

$$= \$143,800 - \$88,100 = \underline{\$55,700}$$
2. Even though Kapinski has a current ratio that is over 1 to 1, it may experience trouble paying its bills, specifically its accounts payable. This depends on two factors: (1) how long it normally takes to collect accounts receivable and (2) the normal length of time to sell inventory. In addition, the company must be concerned about whether any portion of the accounts receivable may prove to be uncollectible and whether any portion of the inventory is not saleable.
3. Three things Kapinski might be able to do to help it pay its bills on time:
 - a. Decrease the average collection period for accounts receivable.
 - b. Negotiate with suppliers to increase the time Kapinski is given to pay for its accounts payable.
 - c. Reduce its inventory levels.

LO 5**PROBLEM 2-6A SINGLE-STEP INCOME STATEMENT**

1. Single-step income statement:

**CORBIN ENTERPRISES
INCOME STATEMENT
FOR THE CURRENT YEAR**

Revenues:		
Sales	\$350,000	
Dividend	<u>2,700</u>	
Total revenues		\$352,700
Expenses:		
Cost of goods sold	\$150,000	
Wages—office	45,600	
Income tax	30,700	
Rent—office	26,400	
Rent—salesperson's car	18,000	
Advertising	9,000	
Utilities	6,750	
Depreciation—computer	4,500	
Interest	1,900	
Supplies—office	<u>1,300</u>	
Total expenses		<u>294,150</u>
Net income		<u>\$ 58,550</u>

2. A single-step income statement does not lend itself as readily to analysis as does a multiple-step statement. The lack of any type of grouping of the various expenses makes any type of analysis more difficult.

LO 5**PROBLEM 2-7A MULTIPLE-STEP INCOME STATEMENT AND PROFIT MARGIN****1. Multiple-step income statement:**

**CORBIN ENTERPRISES
INCOME STATEMENT
FOR THE CURRENT YEAR**

Sales.....		\$350,000	
Cost of goods sold		<u>150,000</u>	
Gross profit			\$200,000
Operating expenses:			
Selling expenses:			
Advertising	\$ 9,000		
Rent—salesperson’s car	<u>18,000</u>		
Total selling expenses		\$ 27,000	
General and administrative expenses:			
Depreciation—computer.....	\$ 4,500		
Rent—office	26,400		
Supplies—office	1,300		
Wages—office	45,600		
Utilities.....	<u>6,750</u>		
Total general and administrative expenses		<u>84,550</u>	
Total operating expenses.....			<u>111,550</u>
Income from operations			\$ 88,450
Other revenues and expenses:			
Interest expense	\$ 1,900		
Dividend revenue.....	<u>2,700</u>		
Excess of other revenues over other expenses			<u>800</u>
Income before taxes			\$ 89,250
Income tax expense			<u>30,700</u>
Net income.....			<u>\$ 58,550</u>

2. The main advantages of the multiple-step income statement are the groupings of various items and the provision of important subtotals such as income from operations.
3. Profit Margin = Net Income/Sales

$$= \$58,550/\$350,000 = 16.7\%$$
4. A profit margin of 16.7% means that for every dollar of sales the company has net income of \$0.167. This would appear to be a good profit margin, but it would be important to compare the profit margin with prior years and with other companies in the same industry.

LO 8**PROBLEM 2-8A STATEMENT OF CASH FLOWS**

1.

WISCONSIN CORPORATION
STATEMENT OF CASH FLOWS
FOR THE FIRST YEAR

Cash flows from operating activities:		
Cash collected from customers	\$ 310,000	
Cash paid for inventory.....	(185,000)	
Cash paid in salaries and wages	(30,100)	
Cash paid in taxes	<u>(40,000)</u>	
Net cash provided by operating activities.....		\$ 54,900
Cash flows from investing activities:		
Purchase of manufacturing facility.....		(150,000)
Cash flows from financing activities:		
Proceeds from issuance of stock.....	\$ 400,000	
Proceeds from long-term note	50,000	
Dividends declared and paid	<u>(4,000)</u>	
Net cash provided by financing activities		<u>446,000</u>
Net increase in cash		\$ 350,900
Cash at beginning of year		<u>0</u>
Cash at end of year.....		<u>\$ 350,900</u>

Note: Wisconsin should report one significant noncash activity as supplementary information to its statement of cash flows: the five-year, \$150,000 note signed to finance the purchase of the manufacturing facility.

2. First, the statement of cash flows reports on operations on a cash basis, as opposed to the income statement which is prepared on an accrual basis. Second, investing and financing activities are also reported on a statement of cash flows. For example, information about dividends paid during the year are shown on a statement of cash flows but not on an income statement.

LO 9**PROBLEM 2-9A BASIC ELEMENTS OF FINANCIAL REPORTS****Letter from the President to Stockholders of Thesaurus Inc.:**

Thesaurus Inc. has just completed another very successful year. The decrease in net income from 2016 to 2017 was due to a single, nonrecurring gain in 2016, a \$400,000 gain on the sale of a subsidiary in that year. A comparison of the operating income of the two years shows a distinct improvement, from \$100,000 in 2016 to \$380,000 in 2017.

All signs point to a successful year just completed. We were able to control our operating expenses: operating income as a percentage of operating revenues increased from 50% to 76%. These are clear signals that Thesaurus is moving in the right direction and should have a solid year of operations in 2018.

ALTERNATE MULTI-CONCEPT PROBLEMS**LO 2,4****PROBLEM 2-10A MAKING BUSINESS DECISIONS: LOANING MONEY TO STARWOOD HOTELS & RESORTS WORLDWIDE, INC.****Part A. Ratio Decision Model****1. Formulate the Question:**

Is Starwood Hotels & Resorts Worldwide, Inc., liquid enough to pay its obligations as they come due?

2. Gather the Information from the Financial Statements:

Current assets: From the balance sheet

Current liabilities: From the balance sheet

3. Calculate the Ratio:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Starwood Hotels & Resorts Worldwide, Inc. (in millions of dollars at December 31, 2015):

Current Assets: \$1,048 + \$54 + \$690 + \$319 + \$32 + \$152 = \$2,295

Current Liabilities: \$33 + \$98 + \$48 + \$1,354 + \$400 + \$303 = \$2,236

$$\text{Current Ratio} = \frac{\$2,295}{\$2,236} = 1.03 \text{ to } 1$$

4. Compare the Ratio with Other Ratios:

<u>Current Ratio</u>			
<u>Starwood Hotels & Resorts Worldwide, Inc.</u>		<u>Hyatt Hotels Corporation and Subsidiaries</u>	
<u>December 31, 2015</u>	<u>December 31, 2014</u>	<u>December 31, 2015</u>	<u>December 31, 2014</u>
1.03 to 1	0.95 to 1	1.02 to 1	2.34 to 1

Calculations:

Starwood Hotels & Resorts Worldwide, Inc. at December 31, 2014:

$$(\$935 + \$84 + \$661 + \$236 + \$47 + \$199 + \$159)/(\$297 + \$101 + \$73 + \$1,307 + \$416 + \$256) = \$2,321/\$2,450 = 0.95 \text{ to } 1$$

Hyatt Hotels Corporation and Subsidiaries at December 31, 2015:

$$(\$457 + \$96 + \$46 + \$298 + \$12 + \$152 + \$63)/(\$328 + \$141 + \$516 + \$122) = \$1,124/\$1,107 = 1.02 \text{ to } 1$$

Hyatt Hotels Corporation and Subsidiaries at December 31, 2014:

$$(\$685 + \$359 + \$130 + \$274 + \$17 + \$108 + \$47 + \$26 + \$63)/(\$9 + \$130 + \$468 + \$120 + \$3) = \$1,709/\$730 = 2.34 \text{ to } 1$$

PROBLEM 2-10A (Continued)**5. Interpret the Ratios:**

Starwood Hotels & Resorts Worldwide's current ratio is slightly higher at the end of 2015 compared to the end of 2014, 1.03 compared to 0.95. Hyatt Hotel's current ratio decreased from one year to the next, 1.02 compared to 2.34. On the basis of the current ratios alone, the liquidity of the two companies are nearly identical at the end of 2015.

The composition of a company's current assets adds another level to the analysis of liquidity. Both companies' cash and cash equivalents, the most liquid of assets, comprise over 40% of their current assets at the end of 2015 (46% for Starwood and 41% for Hyatt).

Part B. Business Decision Model**1. Formulate the Question:**

After considering all relevant information, should I loan money to Starwood Hotels & Resorts Worldwide?

2. Gather Information from the Financial Statements and Other Sources:

The information will come from a variety of sources, not limited to but including:

- a. The balance sheet provides information about liquidity.
- b. The income statement provides information about profitability.
- c. The statement of cash flows reports on the company's cash inflows and outflows.
- d. The outlook for the hospitality industry, including consumer trends, foreign competition for travel dollars, labor issues, and other factors.
- e. The outlook for the economy during the time the loan would be outstanding.
- f. Projections for interest rates for similar loans during the term of the loan.
- g. Alternative uses for the bank's money.

3. Analyze the Information Gathered:

The information gathered in 2. above must be analyzed. Among the relevant questions that must be answered are the following:

- a. Refer to part (5) of the Ratio Decision Model for a comparison of the current ratios for Starwood Hotels & Resorts Worldwide and its competitor, Hyatt Hotels, over the last two years. The analysis also needs to consider the composition of the current assets. For example, cash and receivables are more liquid than inventories and prepaid expenses. The company's existing long-term liabilities must also be taken into account.
- b. What has been the trend in profits over recent years? Has the company been able to increase revenues and at the same time control its costs?
- c. How much cash has the company spent in recent years to retire existing debt? What other significant cash outflows have been made?
- d. What is the company's share of the hospitality industry's market? How significant are revenues from foreign locations?
- e. Is inflation projected to increase during this time? Are labor costs likely to increase?
- f. Are interest rates projected to increase or decrease during the term of the loan?

PROBLEM 2-10A (Concluded)

- g. If a loan is not made to Starwood Hotels & Resorts Worldwide, what other uses does the bank have for the money?
4. Make the Decision:
Taking into account all of the various sources of information, decide either to loan money to Starwood Hotels & Resorts Worldwide or find an alternative use for the money.
5. Monitor Your Decision:
If you decide to make the loan, you will need to monitor it periodically. During the time the loan is outstanding, you will want to assess the company's continuing liquidity as well as other factors you considered before making the loan.

LO 2,5**PROBLEM 2-11A COMPARABILITY AND CONSISTENCY IN INCOME STATEMENTS**

1. The income statements for both years are in single-step form.
2. Income statement items as a percentage of sales:

	2017	2016
Sales.....	<u>100.0%</u>	<u>100.0%</u>
Cost of sales	36.0	30.0
Sales salaries.....	25.1	26.5
Delivery expense	10.6	11.7
Office supplies	3.2	3.6
Depreciation—truck	2.4	2.7
Computer line expense	<u>1.4</u>	<u>1.3</u>
Total expenses.....	<u>78.7%</u>	<u>75.8%</u>
Net income.....	<u>21.3%</u>	<u>24.2%</u>

Restating each item on the income statement as a percentage of sales allows the reader to better understand how successful a business was in controlling costs. For example, Chisholm Company increased its sales by \$200,000 for the year, but this did not translate to an increase in the bottom line, i.e., net income. The restatement of each of the expenses as a percentage of sales reveals why net income did not increase. Total expenses, as a percentage of sales, increased from 75.8% to 78.7%. Aside from a slight increase in one of the minor expenses, computer lines, only one other expense increased as a percentage of sales. The primary reason for the increase in expenses as a percentage of sales was the increase in the cost of Chisholm's products from 30% to 36% of sales.

LO 1,4,8**PROBLEM 2-12A CASH FLOW****Cash available to pay a dividend on December 31, 2018:**

Cash balance, December 1, 2018.....	\$ 15,000
Cash collections from November 2018 sales	40,000*
Operating expenses	(10,000)
Payroll: 2 × \$4,500	<u>(9,000)</u>
Cash balance, December 31, 2018.....	<u>\$ 36,000</u>

*Accounts receivable balance on December 1.

Conclusion: Roosevelt has \$50,000 par value of stock, with the par value of each share set at \$2. Thus, there are 25,000 shares of stock outstanding. At \$1 per share in dividends, \$25,000 in cash will be needed to meet the annual dividend payment. On the surface, it appears that Roosevelt should have no trouble in paying its annual dividend—the above analysis indicates a December 31, 2018, cash balance of \$36,000. However, the \$30,000 note payable, along with six months' interest of \$450 ($\$30,000 \times 3\% \times 6/12$), will be due two weeks into the new year (January 15, 2019). If we assume that accounts receivable are collected relatively evenly over the month, the balance available to repay the \$30,000 note and interest on January 15, 2019, would be only \$29,000:

December sales $\$40,000 \times 95\%$	\$ 38,000
Unearned revenue already collected	<u>(2,000)</u>
December sales collected in January	\$ 36,000
Divided by 2 (assuming receivables are collected ratably over the month).....	$\div \quad \underline{2}$
Cash available on January 15 from December sales.....	\$ 18,000
Cash available, December 31, 2018.....	36,000
Dividend payment	<u>(25,000)</u>
Cash available to repay note and interest.....	<u>\$ 29,000</u>

Conclusion: Roosevelt should not declare its normal annual dividend of \$1 per share.

DECISION CASES**READING AND INTERPRETING FINANCIAL STATEMENTS****LO 4****DECISION CASE 2-1 COMPARING TWO COMPANIES IN THE SAME INDUSTRY:
CHIPOTLE AND PANERA BREAD**

(Amounts in thousands of dollars)

1. Panera Bread12/29/15 Working capital: $\$502,789 - \$399,443 = \underline{\$103,346}$ 12/30/14 Working capital: $\$406,166 - \$352,712 = \underline{\$53,454}$ Change in working capital: $\$103,346 - \$53,454 = \underline{\$49,892}$

Chipotle:

12/31/15 Working capital: $\$814,647 - \$279,942 = \underline{\$534,705}$ 12/31/14 Working capital: $\$859,511 - \$245,710 = \underline{\$613,801}$ Change in working capital: $\$534,705 - \$613,801 = \underline{\$(79,096)}$ **2. Panera Bread**12/29/15 Current ratio: $\$502,789/\$399,443 = \underline{1.26:1}$ 12/30/14 Current ratio: $\$406,166/\$352,712 = \underline{1.15:1}$ Percentage change in ratio: $(1.26 - 1.15)/1.15 = 9.6\% \text{ increase}$

Chipotle:

12/31/15 Current ratio: $\$814,647/\$279,942 = \underline{2.91:1}$ 12/31/14 Current ratio: $\$859,511/\$245,710 = \underline{3.50:1}$ Percentage change in ratio: $(2.91 - 3.50)/3.50 = 16.9\% \text{ decrease}$

- 3.** The composition of current assets is similar for the two companies. One noticeable difference is the large amount of investments in Chipotle's current assets (the company's largest current asset). Given the nature of the business, neither company carries large amounts in inventory. Cash and cash equivalents is the largest current asset for Panera Bread.
- 4.** Panera Bread's current ratio increased during the year by 9.6%, while Chipotle's decreased by 16.9%. However, Chipotle's current ratio at the end of 2015 of 2.91 is much higher than Panera Bread's ratio of 1.26.

LO 4**DECISION CASE 2-2 READING PANERA BREAD'S BALANCE SHEET**

1. Cash and cash equivalents is the largest of Panera Bread's current assets on December 29, 2015. It represents \$241,886 thousand/\$502,789 thousand, or 48.1% of the total current assets. Large amounts of cash on hand increases a company's liquidity, but generally speaking cash is a non-earning asset and amounts beyond what is needed to meet liquidity needs should be invested.
2. Inventories is the smallest of Panera Bread's current assets, representing only \$22,482 thousand/\$502,789 thousand, or 4.5% of total current assets. This is not unusual for a company in the restaurant business, especially one like Panera that relies on fresh baked products for sale to customers.

MAKING FINANCIAL DECISIONS**LO 8****DECISION CASE 2-3 ANALYSIS OF CASH FLOW FOR A SMALL BUSINESS**

All financial decisions involve a trade-off between risk and return. The offer to work for an investment firm for \$40,000 per year may be much less risky than running one's own business. Charles needs to consider, however, how likely it is that the employment with the investment firm will continue indefinitely. For example, could a downswing in the economy cause the firm to cut Charles's position?

Charles has experienced for himself the risks and rewards of running a business. To date, the business has not produced significant profits: only \$11,500 over a two-year period. However, the significant increase in commissions revenue from one year to the next is very encouraging. This is an example of the potential rewards of running a business.

This case also illustrates the difference between income and cash flow. Because depreciation is not a cash flow, there is a significant difference between the cash flow for each of the two years and net income. Assuming that the revenues and all of the expenses other than depreciation result in cash flows of the business, the cash inflow for the first year is (\$11,000) + \$15,000 (add-back of depreciation), or \$4,000. The cash inflow for the second year is even better, after adjusting for depreciation: \$22,500 + \$15,000, or \$37,500.

LO 9

DECISION CASE 2-4 FACTORS INVOLVED IN AN INVESTMENT DECISION

Sections of the annual report that should be read in comparing investment alternatives:

1. **Financial statements, including income statement, balance sheet, statement of stockholders' equity, and statement of cash flows**—The statements give an overall picture of the financial position and results of operations of the companies.
2. **Notes to the financial statements**—The notes are an integral part of the financial statements. They give the reader an indication of the accounting policies used; the various legal obligations, such as those for leases and pension plans; the composition of the long-term assets; and many other details.
3. **Management's discussion and analysis**—This report by management will reveal how management views the year just completed in comparison to prior years and how it feels about the company's prospects in the future.
4. **Other information contained in the annual report**—This might include descriptions of the company's services as well as plans for expansion and other nonfinancial information. The investor may also want to consult various trade publications for insights into the industry.

ETHICAL DECISION MAKING

LO 2

DECISION CASE 2-5 THE EXPENDITURE APPROVAL PROCESS

The sales rep should be skeptical about Roberto's request for two separate bills for \$900 each. If the rep is aware that the request was made to circumvent a corporate policy, it would be unethical of the rep to comply with the request. This certainly puts the rep in a predicament: should he or she risk losing the sale by refusing to write up two separate bills?

Roberto is not acting in an ethical manner by requesting two bills, given that it is a deliberate attempt on his part to circumvent corporate policy. He may not agree with the policy, but it is not ethical to devise a scheme to work around the policy. Instead, he should write a memo to the corporate chief financial officer to explain his dissatisfaction with the policy and why it is not appropriate in this particular situation.

Whether or not the corporate policy is appropriate is difficult to answer without additional information. At the very least, it seems unreasonable that it should take three weeks for the approval process.

LO 4,6**DECISION CASE 2-6 SUSAN APPLIES FOR A LOAN****1. Recognize an ethical dilemma:**

The ethical dilemma for you is whether you should present financial statements to the banker that are incomplete (that make Susan's financial position appear to be better than it actually is).

2. Analyze the key elements in the situation:

- a. Your decision affects not only Susan but also the banker. Susan could benefit if a balance sheet is not provided and the bank could be harmed.
- b. Susan would benefit by getting a loan based on incomplete information and the bank would be at risk by not having all the information it needs to make a decision.
- c. The bank has the right to all the relevant information it needs to make a loan decision.
- d. The interests of Susan, the owner of the business, and those of the bank are in conflict in this situation.
- e. Your responsibility is to present a balance sheet that accurately reflects all of Susan's debts.

3. List alternatives and evaluate the impact of each on those affected:

The alternatives are to follow Susan's instructions and not provide a balance sheet or discuss with her your concerns. If the balance sheet is not provided, the banker will not have all the relevant information useful to the decision process. Without the balance sheet, the banker will not be able to predict future cash outflows related to the company's debt. Also, the information is not neutral because it is presented to show the company's financial health as better than it is.

4. Select the best alternative:

You should provide the balance sheet to the bank. If the banker does not receive the balance sheet and makes a decision only based on the income statement, this user of the information will not evaluate the risk of the company correctly. It is unlikely that the banker would consider making the loan on the basis of the quarterly income statements alone. The most recent balance sheet tells the banker about the overall financial strength of the company, and it is an integral part of any loan analysis. As the chief financial officer for the organization, you have a responsibility to provide the banker with the necessary information needed to make an informed decision on the loan. Susan would rather not show the banker the balance sheet because it would reveal the substantial loan already on the books. You are obligated, however, to provide the balance sheet to the bank if it would be relevant to the bank's decision. Without it, it is unlikely the bank will make the loan.

Chapter 2

Financial Statements and the Annual Report

Objectives of Financial Reporting

- ❑ Provide useful information to those who must make financial decisions
 - **Balance sheet**—assets and liabilities
 - **Income statement**—revenues and expenses
 - **Statement of cash flows**—cash flows from operating, investing, and financing activities
 - **Notes**—accounting policies

LO 1

Qualitative Characteristics of Accounting Information

- ❑ **Understandability:** the quality of accounting information that makes it comprehensible to those willing to spend the necessary time
- ❑ **Relevance:** the capacity of information to make a difference in a decision
- ❑ **Faithful representation:** the quality of information that makes it complete, neutral, and free from error

LO 2

Qualitative Characteristics of Accounting Information (continued)

- ❑ **Comparability:** for accounting information, the quality that allows a user to analyze two or more companies and look for similarities and differences
- ❑ **Consistency:** for accounting information, the quality that allows a user to compare two or more accounting periods for a single company

Qualitative Characteristics of Accounting Information (continued)

- ❑ **Materiality:** the magnitude of an accounting information omission or misstatement that will affect the judgment of someone relying on the information
- ❑ **Conservatism:** the practice of using the least optimistic estimate when two estimates of amounts are about equally likely

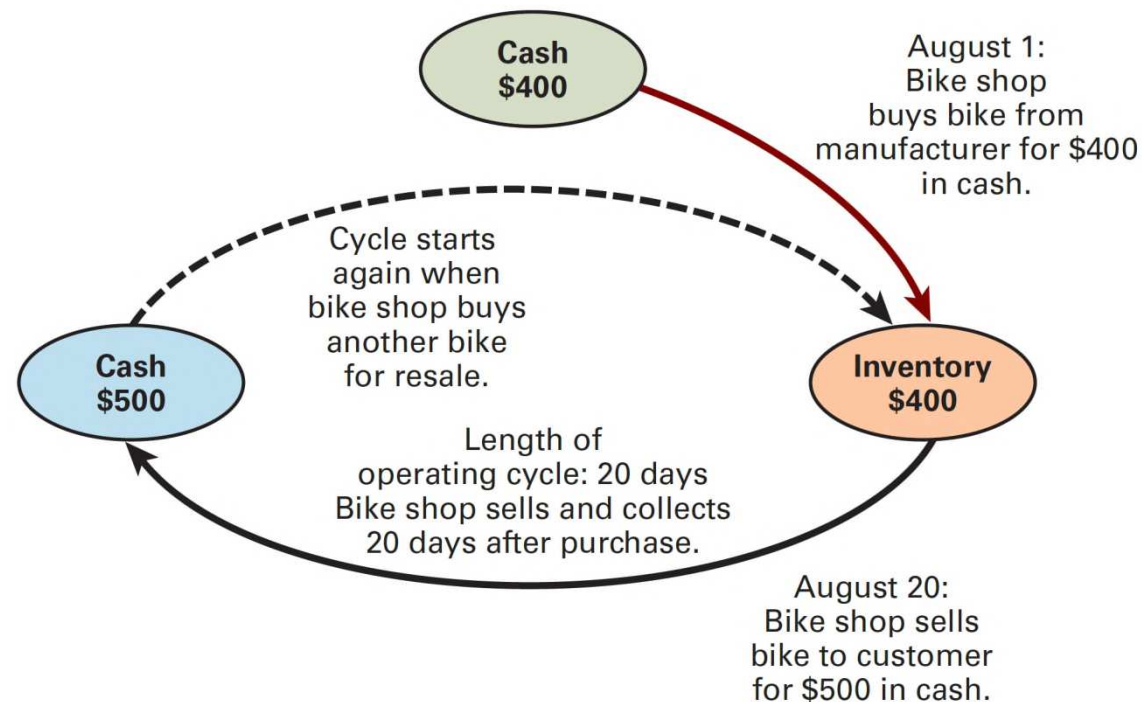
Classified Balance Sheet

- ❑ Separates both assets and liabilities into current and noncurrent
 - Current assets
 - Noncurrent assets
 - Current liabilities
 - Long-term liabilities
 - Stockholders' equity

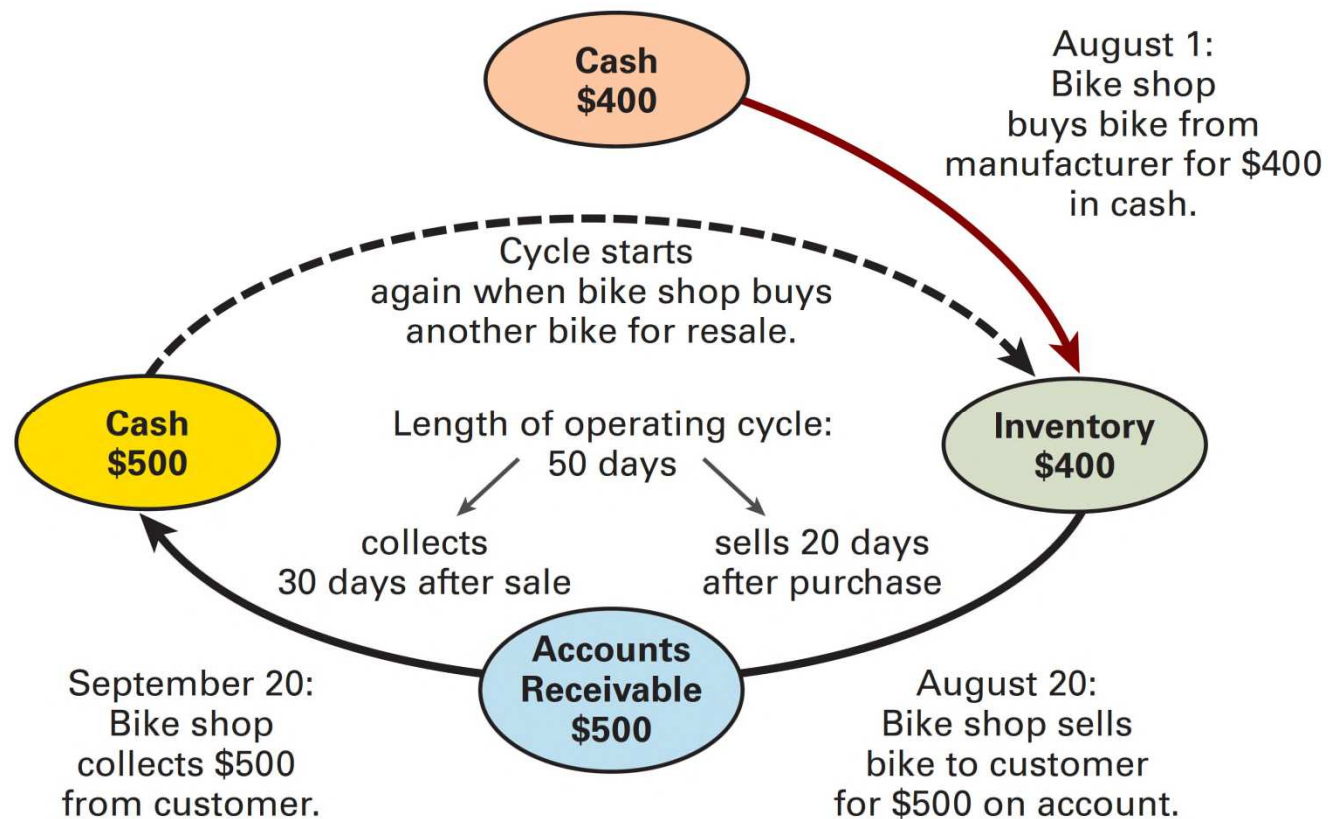
LO 3

Operating Cycle

- Period of time between the purchase of inventory and the collection of any receivable from the sale of the inventory



Operating Cycle (continued)



Current Assets

- ❑ Expected to be realized in cash, sold or consumed within one year or operating cycle
- ❑ Example: cash, marketable securities, accounts receivable, merchandise inventory, prepaid insurance, store supplies, etc.

Example—Current Assets Section

Dixon Sporting Goods Partial Balance Sheet

Current assets

Cash	\$ 5,000	
Marketable securities	11,000	
Accounts receivable	23,000	
Merchandise inventory	73,500	
Prepaid insurance	4,800	
Store supplies	<u>700</u>	
Total current assets		\$118,000

Noncurrent or Long-term Assets

- ❑ Other than the definition of current asset
- ❑ Three common categories:
 - **Investments:** securities not expected to be sold within the next year
 - **Property, plant, and equipment:** tangible, productive assets used in the operation of a business
 - **Intangibles:** lack physical substance
 - ❑ Example: trademarks, copyrights, franchise rights, patents, and goodwill

Example—Noncurrent or Long-term Assets Section

Dixon Sporting Goods Partial Balance Sheet			
Investments			
Land held for future office site			\$150,000
Property, plant, and equipment			
Land		\$100,000	
Buildings	\$150,000		
Less: Accumulated depreciation	<u>60,000</u>	90,000	
Store furniture and fixtures	\$ 42,000		
Less: Accumulated depreciation	<u>12,600</u>	<u>29,400</u>	
Total property, plant, and equipment			219,400
Intangible assets			
Franchise agreement			55,000

Current Liabilities

- ❑ Obligation that will be satisfied within one year or an operating cycle
- ❑ Example: accounts payable, salaries and wages payable, income taxes payable, interest payable, bank loan payable

Example—Current Liabilities Section

Dixon Sporting Goods Partial Balance Sheet

Current liabilities

Accounts payable	\$15,700	
Salaries and wages payable	9,500	
Income taxes payable	7,200	
Interest payable	2,500	
Bank loan payable	<u>25,000</u>	
Total current liabilities		\$59,900

Long-term Liabilities

- ❑ Obligation that will not be paid within the next year or an operating cycle, whichever is longer
- ❑ Example: notes payable and bonds payable

Example—Long-term Liabilities Section

Dixon Sporting Goods Partial Balance Sheet

Long-term debt

Notes payable, due December 31, 2024

\$120,000

Stockholders' Equity

- ❑ Owners claims on assets of the business
- ❑ Arise from two sources:
 - Contributed capital
 - ❑ Capital stock: owner's investments in business
 - ❑ Paid-in capital in excess of par value
 - Retained earnings: accumulated earnings, or net income, of the business since its inception less all dividends paid during that time

Example—Stockholders' Equity Section

Dixon Sporting Goods Partial Balance Sheet		
Contributed capital		
Capital stock, \$10 par, 5,000 shares issued and outstanding	\$ 50,000	
Paid-in capital in excess of par value	<u>25,000</u>	
Total contributed capital	\$ 75,000	
Retained earnings	<u>287,500</u>	
Total stockholders' equity		<u>\$362,500</u>

Analysis of Liquidity

- ❑ **Liquidity:** ability to pay debts as they come due
- ❑ **Working capital**
 - Current assets – current liabilities
 - Negative working capital may signal the inability to pay creditors on a timely basis
- ❑ **Current Ratio:** higher ratio indicates high liquidity

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The Income Statement

- ❑ Summarizes the results of operations of an entity for a period of time
- ❑ Reports the excess of revenue over expense—that is the net income
- ❑ **Single-step income statement:** expenses are added together and subtracted from all revenues in single step
- ❑ **Multiple-step income statement:** shows classifications of revenues and expenses as well as important subtotals

LO 5

Example 2.6—Preparing a Single-Step Income Statement

Dixon Sporting Goods Income Statement (Single-Step Format) For the Year Ended December 31, 2017		
Revenues		
Sales	\$357,500	
Interest	<u>1,500</u>	
Total revenues		\$359,000
Expenses		
Cost of goods sold	\$218,300	
Depreciation on store furniture and fixtures	4,200	
Advertising	13,750	
Salaries and wages for sales staff	22,000	
Depreciation on buildings and amortization of trademark	6,000	
Salaries and wages for office staff	15,000	
Insurance	3,600	
Supplies	1,050	
Interest	16,900	
Income taxes	<u>17,200</u>	
Total expenses		<u>318,000</u>
Net income		<u>\$ 41,000</u>

In a **single-step** income statement, expenses are deducted from revenues in one step.

Example 2.7—Preparing a Multiple-Step Income Statement

In a multiple-step income statement:																											
Sales and the costs of sales are compared.	1 <table> <tr><td colspan="2">Dixon Sporting Goods</td></tr> <tr><td colspan="2">Income Statement (Multiple-Step Format)</td></tr> <tr><td colspan="2">For the Year Ended December 31, 2017</td></tr> <tr><td>Sales</td><td>\$357,500</td></tr> <tr><td>Cost of goods sold</td><td><u>218,300</u></td></tr> <tr><td>Gross profit</td><td>\$139,200</td></tr> </table>	Dixon Sporting Goods		Income Statement (Multiple-Step Format)		For the Year Ended December 31, 2017		Sales	\$357,500	Cost of goods sold	<u>218,300</u>	Gross profit	\$139,200														
Dixon Sporting Goods																											
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For the Year Ended December 31, 2017																											
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Cost of goods sold	<u>218,300</u>																										
Gross profit	\$139,200																										
Expenses of the business are detailed.	<table> <tr><td colspan="2">Operating expenses</td></tr> <tr><td colspan="2">Selling expenses</td></tr> <tr><td>Depreciation on store furniture and fixtures</td><td>\$ 4,200</td></tr> <tr><td>Advertising</td><td>13,750</td></tr> <tr><td>Salaries and wages</td><td><u>22,000</u></td></tr> <tr><td>Total selling expenses</td><td>\$ 39,950</td></tr> <tr><td colspan="2">General and administrative expenses</td></tr> <tr><td>Depreciation on buildings and amortization of trademark</td><td>\$ 6,000</td></tr> <tr><td>Salaries and wages</td><td>15,000</td></tr> <tr><td>Insurance</td><td>3,600</td></tr> <tr><td>Supplies</td><td><u>1,050</u></td></tr> <tr><td>Total general and administrative expenses</td><td>25,650</td></tr> <tr><td>Total operating expenses</td><td><u>65,600</u></td></tr> </table>	Operating expenses		Selling expenses		Depreciation on store furniture and fixtures	\$ 4,200	Advertising	13,750	Salaries and wages	<u>22,000</u>	Total selling expenses	\$ 39,950	General and administrative expenses		Depreciation on buildings and amortization of trademark	\$ 6,000	Salaries and wages	15,000	Insurance	3,600	Supplies	<u>1,050</u>	Total general and administrative expenses	25,650	Total operating expenses	<u>65,600</u>
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Total operating expenses	<u>65,600</u>																										
Isolating expenses and revenues by type is useful in analyzing a business.	<table> <tr><td colspan="2">Income from operations</td></tr> <tr><td colspan="2"></td></tr> <tr><td colspan="2">Other revenues and expenses</td></tr> <tr><td>Interest revenue</td><td>\$ 1,500</td></tr> <tr><td>Interest expense</td><td><u>16,900</u></td></tr> <tr><td>Excess of other expenses over other revenue</td><td>15,400</td></tr> <tr><td>Income before income taxes</td><td>\$ 58,200</td></tr> </table>	Income from operations				Other revenues and expenses		Interest revenue	\$ 1,500	Interest expense	<u>16,900</u>	Excess of other expenses over other revenue	15,400	Income before income taxes	\$ 58,200												
Income from operations																											
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Income before income taxes	\$ 58,200																										
Operating income is highlighted.	2 <table> <tr><td colspan="2">Income from operations</td></tr> <tr><td colspan="2"></td></tr> <tr><td colspan="2">Income before income taxes</td></tr> <tr><td colspan="2"></td></tr> <tr><td>Income tax expense</td><td><u>17,200</u></td></tr> <tr><td>Net income</td><td><u>\$ 41,000</u></td></tr> </table>	Income from operations				Income before income taxes				Income tax expense	<u>17,200</u>	Net income	<u>\$ 41,000</u>														
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Net income	<u>\$ 41,000</u>																										
"Nonoperating" revenues and expenses are included here.	3 <table> <tr><td colspan="2">Income before income taxes</td></tr> <tr><td colspan="2"></td></tr> <tr><td>Income tax expense</td><td><u>17,200</u></td></tr> <tr><td>Net income</td><td><u>\$ 41,000</u></td></tr> </table>	Income before income taxes				Income tax expense	<u>17,200</u>	Net income	<u>\$ 41,000</u>																		
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Net income	<u>\$ 41,000</u>																										

Analyzing Company's Operations

- ❑ **Profit margin:** Net income divided by sales
 - High margin implies company is generating revenue and also controlling its costs

Profit Margin		
Formula	For Dixon Sporting Goods	
$\frac{\text{Net Income}}{\text{Sales}}$	$\frac{\$41,000}{\$357,500}$	$= 11\%$

Dixon Sporting Goods Partial Income Statement		
Sales		\$357,500
Net income		\$41,000

LO 6

Statement of Retained Earnings

- ❑ Reports the net income and any dividends declared during the period
- ❑ Important link between the income statement and the balance sheet
- ❑ Explain the changes in the components of owners' equity during the period

LO 7

Example 2.9—Preparing a Statement of Retained Earnings

Dixon Sporting Goods Statement of Retained Earnings For the Year Ended December 31, 2017	
Retained earnings, January 1, 2017	\$271,500
Net income for 2017	41,000
Dividends declared and paid in 2017	<u>(25,000)</u>
Retained earnings, December 31, 2017	<u>\$287,500</u>

Statement of Cash Flows

- ❑ Summarizes a company's operating, investing, and financing activities for the period
- ❑ Each of these categories can result in a net inflow or a net outflow of cash

Example 2.10—Preparing a Statement of Cash Flows

Dixon Sporting Goods Statement of Cash Flows For the Year Ended December 31, 2017			
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash collected from customers	\$362,500		
Cash collected in interest	<u>1,500</u>		
Total cash collections		\$364,000	
Cash payments for:			
Inventory	\$217,200		
Salaries and wages	38,500		
Interest	16,900		
Store supplies	850		
Insurance	4,800		
Advertising	13,750		
Income taxes	<u>15,900</u>		
Total cash payments		<u>307,900</u>	
Net cash provided by operating activities		\$ 56,100	
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of land for future office site		(150,000)	
CASH FLOWS FROM FINANCING ACTIVITIES			
Dividends declared and paid	\$ (25,000)		
Proceeds from issuance of long-term note	<u>120,000</u>		
Net cash provided by financing activities		95,000	
Net increase in cash		\$ 1,100	
Cash at beginning of year		<u>3,900</u>	
Cash at end of year		<u>\$ 5,000</u>	

Operating activities involve the purchase and sale of products or services.

Investing activities involve the acquisition and sale of long-term assets.

Financing activities involve the issuance and repayment of long-term liabilities and stock and the payment of dividends.

Read and Use the Financial Statements and Annual Report

- ❑ The classified balance sheet and multiple-step income statement yield more useful information to decision makers than their simpler versions
- ❑ Annual reports contain more information than just the financial statements
- ❑ Management's Discussion and Analysis provides explanatory comments about certain results reflected in the financial statements

LO 9

Read and Use the Financial Statements and Annual Report (continued)

- ❑ The Report of Independent Accountants is provided by the company's auditor
 - Auditor expresses an opinion on whether the financial statements fairly represent the accounting treatment of a company's economic activity for the year
- ❑ Notes to the Consolidated Financial Statements are generally supplementary disclosures required by GAAP
 - Help explain detail behind the accounting treatment of certain items in the financial statements

The Ratio Analysis Model

1. How liquid is a company?
2. Gather the information about current assets and current liabilities
3. Calculate current ratio
4. Compare the ratio with prior years and with competitors
5. Interpret the ratios—higher the current ratio, the more liquid the company

The Business Decision Model

1. If you were a banker, would you be willing to loan money to a company?
2. Gather information from the financial statements and other sources
3. Compare the company's current ratios with industry averages and look at trends
4. Loan money or find an alternative use for the money
5. Monitor the loan periodically

End of Chapter 2