

# CHAPTER 2

## A Further Look at Financial Statements

### Learning Objectives

1. Identify the sections of a classified balance sheet.
2. Identify tools for analyzing financial statements and ratios for computing a company's profitability.
3. Explain the relationship between a retained earnings statement and a statement of stockholders' equity.
4. Identify and compute ratios for analyzing a company's liquidity and solvency using a balance sheet.
5. Use the statement of cash flows to evaluate solvency.
6. Explain the meaning of generally accepted accounting principles.
7. Discuss financial reporting concepts.

### Summary of Questions by Learning Objectives and Bloom's Taxonomy

Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT	Item	LO	BT
<b>Questions</b>														
1.	1	K	6.	2, 4, 5	C	10.	4, 5	K	14.	7	C	18.	7	C
2.	1	K	7.	2, 4, 5	K	11.	2, 4, 5	C	15.	7	C	19.	7	C
3.	1	C	8.	4	C	12.	6	K	16.	7	C	20.	1	C
4.	1	C	9.	4, 5	C	13.	6, 7	K	17.	6	C			
5.	1	K												
<b>Brief Exercises</b>														
1.	1	K	4.	3	K	7.	6	K	9.	7	K	11.	7	K
2.	1	AP	5.	4	AP	8.	7	K	10.	7	K			
3.	2	AP	6.	4, 5	AP									
<b>Do It! Review Exercises</b>														
1.	1	AP	2.	1	AP	3.	4, 5	K	4.	7	K			
<b>Exercises</b>														
1.	1	AP	4.	1	AP	7.	2	AP	10.	4	AP	12.	7	K
2.	1	AP	5.	1	AP	8.	1, 3, 4	AP	11.	4, 5	AP	13.	7	C
3.	1	AP	6.	1	AP	9.	4	AP						
<b>Problems: Set A</b>														
1.	1	AP	3.	1, 3	AP	5.	2, 4, 5	AP	7.	2, 4, 5	AP	8.	6, 7	E
2.	1, 3	AP	4.	2, 4, 5	AN	6.	2, 4, 5	AP						
<b>Problems: Set B</b>														
1.	1	AP	3.	1, 3	AP	5.	2, 4, 5	AP	7.	2, 4, 5	AP	8.	6, 7	E
2.	1, 3	AP	4.	2, 4, 5	AN	6.	2, 4, 5	AP						

## ASSIGNMENT CHARACTERISTICS TABLE

<b>Problem Number</b>	<b>Description</b>	<b>Difficulty Level</b>	<b>Time Allotted (min.)</b>
1A	Prepare a classified balance sheet.	Simple	10–20
2A	Prepare financial statements.	Moderate	20–30
3A	Prepare financial statements.	Moderate	20–30
4A	Compute ratios; comment on relative profitability, liquidity, and solvency.	Moderate	20–30
5A	Compute and interpret liquidity, solvency, and profitability ratios.	Simple	10–20
6A	Compute and interpret liquidity, solvency, and profitability ratios.	Moderate	15–25
7A	Compute ratios and compare liquidity, solvency, and profitability for two companies.	Moderate	15–25
8A	Comment on the objectives and qualitative characteristics of financial reporting.	Simple	10–20
1B	Prepare a classified balance sheet.	Simple	10–20
2B	Prepare financial statements.	Moderate	20–30
3B	Prepare financial statements.	Moderate	20–30
4B	Compute ratios; comment on relative profitability, liquidity, and solvency.	Moderate	20–30
5B	Compute and interpret liquidity, solvency, and profitability ratios.	Simple	10–20
6B	Compute and interpret liquidity, solvency, and profitability ratios.	Moderate	15–25
7B	Compute ratios and compare liquidity, solvency, and profitability for two companies.	Moderate	15–25
8B	Comment on the objectives and qualitative characteristics of accounting information.	Simple	10–20

# ANSWERS TO QUESTIONS

1. A company's operating cycle is the average time that is required to go from cash to cash in producing revenue.
2. Current assets are assets that a company expects to convert to cash or use up within one year of the balance sheet date or the company's operating cycle, whichever is longer. Current assets are listed in the order in which they are expected to be converted into cash.
3. Long-term investments are investments in stocks and bonds of other companies where the conversion into cash is not expected within one year or the operating cycle, whichever is longer and plant assets not currently in operational use. Property, plant, and equipment are tangible resources of a relatively permanent nature that are being used in the business and not intended for sale.
4. Current liabilities are obligations that will be paid within the coming year or operating cycle, whichever is longer. Long-term liabilities are obligations that will be paid after one year.
5. The two parts of stockholders' equity and the purpose of each are: (1) **Common stock** is used to record investments of assets in the business by the owners (stockholders). (2) **Retained earnings** is used to record net income retained in the business.
6. (a) Lorie is not correct. There are three characteristics: liquidity, profitability, and solvency.  
(b) The three parties are not primarily interested in the same characteristics of a company. Short-term creditors are primarily interested in the liquidity of the company. In contrast, long-term creditors and stockholders are primarily interested in the profitability and solvency of the company.
7. (a) Liquidity ratios: Working capital and current ratio.  
(b) Solvency ratios: Debt to assets and free cash flow.  
(c) Profitability ratio: Earnings per share.
8. Debt financing is riskier than equity financing because debt must be repaid at specific points in time, whether the company is performing well or not. Thus, the higher the percentage of assets financed by debt, the riskier the company.
9. (a) Liquidity ratios measure the short-term ability of the company to pay its maturing obligations and to meet unexpected needs for cash.  
(b) Profitability ratios measure the income or operating success of a company for a given period of time.  
(c) Solvency ratios measure the company's ability to survive over a long period of time.

## Questions Chapter 2 (Continued)

10. (a) The increase in earnings per share is good news because it means that profitability has improved.
- (b) An increase in the current ratio signals good news because the company improved its ability to meet maturing short-term obligations.
- (c) The increase in the debt to assets ratio is bad news because it means that the company has increased its obligations to creditors and has lowered its equity “buffer.”
- (d) A decrease in free cash flow is bad news because it means that the company has become less solvent. The higher the free cash flow, the more solvent the company.
11. (a) The debt to assets ratio and free cash flow indicate the company’s ability to repay the face value of the debt at maturity and make periodic interest payments.
- (b) The current ratio and working capital indicate a company’s liquidity and short-term debt-paying ability.
- (c) Earnings per share indicates the earning power (profitability) of an investment.
12. (a) Generally accepted accounting principles (GAAP) are a set of rules and practices, having substantial support, that are recognized as a general guide for financial reporting purposes.
- (b) The body that provides authoritative support for GAAP is the Financial Accounting Standards Board (FASB).
13. (a) The primary objective of financial reporting is to provide information useful for decision making.
- (b) The fundamental qualitative characteristics are relevance and faithful representation. The enhancing qualities are comparability, consistency, verifiability, timeliness, and understandability.
14. Jantz is correct. Consistency means using the same accounting principles and accounting methods from period to period within a company. Without consistency in the application of accounting principles, it is difficult to determine whether a company is better off, worse off, or the same from period to period.
15. Comparability results when different companies use the same accounting principles. Consistency means using the same accounting principles and methods from year to year within the same company.
16. The cost constraint allows accounting standard-setters to weigh the cost that companies will incur to provide information against the benefit that financial statement users will gain from having the information available.
17. Accounting standards are not uniform because individual countries have separate standard-setting bodies. Currently many non-U.S. countries are choosing to adopt International Financial Reporting Standards (IFRS). It appears that accounting standards in the United States will move toward compliance with IFRS.

## Questions Chapter 2 (Continued)

18. Accounting relies primarily on two measurement principles. Fair value is sometimes used when market price information is readily available. However, in many situations reliable market price information is not available. In these instances, accounting relies on historical cost as its basis.
19. The economic entity assumption states that every economic entity can be separately identified and accounted for. This assumption requires that the activities of the entity be kept separate and distinct from (1) the activities of its owners (the shareholders) and (2) all other economic entities. A shareholder of a company charging personal living costs as expenses of the company is an example of a violation of the economic entity assumption.
20. At December 31, 2011 Tootsie Roll's largest current asset was Cash and Cash Equivalents of \$78,612, its largest current liability is accrued liabilities of \$43,069 and its largest item under other assets was trademarks of \$175,024. (Note: amounts are in thousands)

# SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 2-1

<u>CL</u> Accounts payable	<u>CL</u> Income taxes payable
<u>CA</u> Accounts receivable	<u>LTI</u> Investment in long-term bonds
<u>PPE</u> Accumulated depreciation	<u>PPE</u> Land
<u>PPE</u> Buildings	<u>CA</u> Inventory
<u>CA</u> Cash	<u>IA</u> Patent
<u>IA</u> Goodwill	<u>CA</u> Supplies

## BRIEF EXERCISE 2-2

### MORALES COMPANY Partial Balance Sheet

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<b>Current assets</b>	
Cash.....	\$10,400
Debt investments.....	8,200
Accounts receivable.....	14,000
Supplies.....	3,800
Prepaid insurance.....	<u>2,600</u>
<b>Total current assets</b> .....	<b><u>\$39,000</u></b>

## BRIEF EXERCISE 2-3

$$\begin{aligned}
 \text{Earnings per share} &= \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shares outstanding}} \\
 &= \frac{\$220 \text{ million} - \$0}{333 \text{ million shares}} = \$0.66 \text{ per share}
 \end{aligned}$$

## BRIEF EXERCISE 2-4

- ICS (a) Issued new shares of common stock
- DRE (b) Paid a cash dividend
- IRE (c) Reported net income of \$75,000
- DRE (d) Reported net loss of \$20,000

## BRIEF EXERCISE 2-5

Working capital = Current assets – Current liabilities

Current assets	\$102,500,000
Current liabilities	<u>201,200,000</u>
Working capital	<u>(\$ 98,700,000)</u>

Current ratio:

$$\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\$102,500,000}{\$201,200,000}$$
$$= .51:1$$

## BRIEF EXERCISE 2-6

- (a) Current ratio  $\frac{\$262,787}{\$293,625} = 0.89:1$
- (b) Debt to assets  $\frac{\$376,002}{\$439,832} = 85.5\%$
- (c) Free cash flow  $\$62,300 - \$24,787 - \$12,000 = \$25,513$

## BRIEF EXERCISE 2-7

- (a) True.  
(b) False.

## BRIEF EXERCISE 2-8

- (a) Predictive value.  
(b) Confirmatory value.  
(c) Materiality  
(d) Complete.  
(e) Free from error.  
(f) Comparability.  
(g) Verifiability.  
(h) Timeliness.

## BRIEF EXERCISE 2-9

- (a) Relevant.
- (b) Faithful representation.
- (c) Consistency.

## BRIEF EXERCISE 2-10

- (a) 1. Predictive value.
- (b) 2. Neutral.
- (c) 3. Verifiable.
- (d) 4. Timely.

## BRIEF EXERCISE 2-11

- (c)

## SOLUTIONS TO DO IT! REVIEW EXERCISES

### DO IT! 2-1

**LONYEAR CORPORATION**  
**Balance Sheet (partial)**  
**December 31, 2014**

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<b>Assets</b>		
<b>Current assets</b>		
Cash .....	\$ 13,000	
Accounts receivable.....	22,000	
Inventory .....	58,000	
Supplies .....	<u>7,000</u>	
Total current assets .....		\$100,000
<b>Property, plant, and equipment</b>		
Equipment.....	180,000	
Less: Accumulated depreciation— equipment.....	<u>50,000</u>	<u>130,000</u>
<b>Total assets.....</b>		<b><u>\$230,000</u></b>



## DO IT! 2-2

<u>IA</u> Trademarks	<u>CA</u> Inventory
<u>CL</u> Notes payable (current)	<u>PPE</u> Accumulated depreciation
<u>NA</u> Interest revenue	<u>PPE</u> Land
<u>CL</u> Income taxes payable	<u>SE</u> Common stock
<u>LTI</u> Debt investments (long-term)	<u>NA</u> Advertising expense
<u>CL</u> Unearned sales revenue	<u>LTL</u> Mortgage payable (due in 3 years)

## DO IT! 2-3

(a)

<u>2014</u>	<u>2013</u>
$\frac{(\$80,000 - \$6,000)}{(40,000 + 75,000)/2} = \$1.29$	$\frac{(\$40,000 - \$6,000)}{(30,000 + 40,000)/2} = \$0.97$

Benser's profitability, as measured by the amount of income available for each share of common stock, increased by 33 percent  $((\$1.29 - \$0.97)/\$0.97)$  during 2014. Earnings per share should not be compared across companies because the number of shares issued by companies varies widely. Thus, we cannot conclude that Benser Corporation is more profitable than Matile Corporation based on its higher EPS in 2014.

(b)

	<u>2014</u>	<u>2013</u>
Current ratio	$\frac{\$54,000}{\$22,000} = 2.45:1$	$\frac{\$36,000}{\$30,000} = 1.20:1$
Debt to assets ratio	$\frac{\$72,000}{\$240,000} = 30\%$	$\frac{\$100,000}{\$205,000} = 49\%$

The company's liquidity, as measured by the current ratio improved from 1.20:1 to 2.45:1. Its solvency also improved, because the debt to assets ratio declined from 49% to 30%.

(c)

Free cash flow	2014: $\$90,000 - \$6,000 - \$3,000 - \$27,000 = \$54,000$
	2013: $\$56,000 - \$6,000 - \$1,500 - \$12,000 = \$36,500$

The amount of cash generated by the company above its needs for dividends and capital expenditures increased from \$36,500 to \$54,000.

## **DO IT! 2-4**

- 1. Monetary unit assumption**
- 2. Faithful representation**
- 3. Economic entity assumption**
- 4. Cost constraint**
- 5. Consistency**
- 6. Historical cost principle**
- 7. Relevance**
- 8. Periodicity assumption**
- 9. Full disclosure principle**
- 10. Materiality**
- 11. Going concern assumption**
- 12. Comparability**

# SOLUTIONS TO EXERCISES

## EXERCISE 2-1

<u>CL</u>	Accounts payable	<u>CA</u>	Inventory
<u>CA</u>	Accounts receivable	<u>CA</u>	Stock investments
<u>PPE</u>	Accumulated depreciation—equip.	<u>PPE</u>	Land (in use)
<u>PPE</u>	Buildings	<u>LTL</u>	Mortgage payable
<u>CA</u>	Cash	<u>CA</u>	Supplies
<u>CL</u>	Interest payable	<u>PPE</u>	Equipment
<u>IA</u>	Goodwill	<u>CA</u>	Prepaid rent
<u>CL</u>	Income taxes payable		

## EXERCISE 2-2

<u>CA</u>	Prepaid advertising	<u>IA</u>	Patents
<u>PPE</u>	Equipment	<u>LTL</u>	Bonds payable
<u>IA</u>	Trademarks	<u>SE</u>	Common stock
<u>CL</u>	Salaries and wages payable	<u>PPE</u>	Accumulated
<u>CL</u>	Income taxes payable		depreciation—equipment
<u>SE</u>	Retained earnings	<u>CL</u>	Unearned sales revenue
<u>CA</u>	Accounts receivable	<u>CA</u>	Inventory
<u>LTI</u>	Land (held for future use)		

**EXERCISE 2-3**

**THE BOEING COMPANY**  
**Partial Balance Sheet**  
**December 31, 2014**  
**(in millions)**

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<b>Assets</b>	
<b>Current assets</b>	
Cash.....	<b>\$ 9,215</b>
Debt investments.....	<b>2,008</b>
Accounts receivable.....	<b>5,785</b>
Notes receivable.....	<b>368</b>
Inventory.....	<b><u>16,933</u></b>
<b>Total current assets.....</b>	<b>\$34,309</b>
<b>Long-term investments</b>	
Notes receivable.....	<b>5,466</b>
<b>Property, plant, and equipment</b>	
Buildings.....	<b>21,579</b>
Less: Accumulated depreciation—buildings.....	<b><u>12,795</u>      8,784</b>
<b>Intangible assets</b>	
Patents.....	<b><u>12,528</u></b>
<b>Total assets.....</b>	<b><u>\$61,087</u></b>

**EXERCISE 2-4**

**H. J. HEINZ COMPANY**  
**Partial Balance Sheet**  
**April 30, 2014**  
**(in thousands)**

<b>Assets</b>			
<b>Current assets</b>			
Cash.....	\$ 373,145		
Accounts receivable .....	1,171,797		
Inventory.....	1,237,613		
Prepaid insurance.....	<u>125,765</u>		
Total current assets.....			<b>\$ 2,908,320</b>
 <b>Property, plant, and equipment</b>			
Land .....		76,193	
Buildings .....	\$4,033,369		
Less: Accumulated depreciation—			
Buildings .....	<u>2,131,260</u>	<u>1,902,109</u>	<b>1,978,302</b>
 <b>Intangible assets</b>			
Goodwill.....		3,982,954	
Trademarks.....		<u>757,907</u>	<u><b>4,740,861</b></u>
Total assets .....			<u><b>\$ 9,627,483</b></u>

## EXERCISE 2-5

**DONOVAN COMPANY**  
**Balance Sheet**  
**December 31, 2014**

Assets			
<b>Current assets</b>			
Cash .....	\$11,840		
Accounts receivable .....	12,600		
Prepaid insurance .....	<u>3,200</u>		
<b>Total current assets .....</b>			<b>\$ 27,640</b>
<b>Property, plant, and equipment</b>			
Land .....		61,200	
Buildings .....	\$105,800		
Less: Accumulated depreciation— buildings .....	<u>45,600</u>	60,200	
Equipment .....	82,400		
Less: Accumulated depreciation— equipment .....	<u>18,720</u>	<u>63,680</u>	<u>185,080</u>
<b>Total assets .....</b>			<b><u>\$212,720</u></b>
<b>Liabilities and Stockholders' Equity</b>			
<b>Current liabilities</b>			
Accounts payable .....		\$ 9,500	
Current maturity of note payable .....		13,600	
Interest payable .....		<u>3,600</u>	
<b>Total current liabilities .....</b>			<b>\$ 26,700</b>
<b>Long-term liabilities</b>			
Note payable (\$93,600 – \$13,600) .....			<u>80,000</u>
<b>Total liabilities .....</b>			<b>106,700</b>
<b>Stockholders' equity</b>			
Common stock .....		60,000	
Retained earnings (\$40,000 + \$6,020*) .....		<u>46,020</u>	
<b>Total stockholders' equity .....</b>			<b><u>106,020</u></b>
<b>Total liabilities and stockholders' equity .....</b>			<b><u>\$212,720</u></b>

\*Net income = \$14,700 – \$780 – \$5,300 – \$2,600 = \$6,020

## EXERCISE 2-6

**TEXAS INSTRUMENTS, INC.**  
**Balance Sheet**  
**December 31, 2014**  
**(in millions)**

Assets			
<b>Current assets</b>			
Cash .....	\$ 1,182		
Debt investments.....	1,743		
Accounts receivable.....	1,823		
Inventory .....	1,202		
Prepaid rent.....	<u>164</u>		
Total current assets .....		\$ 6,114	
<b>Long-term investments</b>			
Stock investments .....		637	
<b>Property, plant, and equipment</b>			
Equipment .....	6,705		
Less: Accumulated depreciation—equipment .....	<u>3,547</u>	3,158	
<b>Intangible assets</b>			
Patents .....		<u>2,210</u>	
<b>Total assets .....</b>			<u><b>\$12,119</b></u>
<b>Liabilities and Stockholders' Equity</b>			
<b>Current liabilities</b>			
Accounts payable.....	\$1,459		
Income taxes payable.....	<u>128</u>		
Total current liabilities .....		\$ 1,587	
<b>Long-term liabilities</b>			
Notes payable .....		<u>810</u>	
Total liabilities.....		2,397	
<b>Stockholders' equity</b>			
Common stock.....	2,826		
Retained earnings.....	<u>6,896</u>		
Total stockholders' equity.....		<u>9,722</u>	
<b>Total liabilities and stockholders' equity.....</b>			<u><b>\$12,119</b></u>

## EXERCISE 2-7

(a) **Earnings per share =  $\frac{\text{Net income — Preferred dividends}}{\text{Average common shares outstanding}}$**

2014 :  $\frac{\$66,176,000 - 0}{(66,282,000 + 64,507,000) / 2} = \$ 1.01$

2013 :  $\frac{\$54,587,000 - 0}{(73,139,000 + 66,282,000) / 2} = \$ .78$

(b) Using net income (loss) as a basis to evaluate profitability, Callaway Golf's income improved by 21% [ $(\$66,176 - \$54,587) \div 54,587$ ] between 2013 and 2014. Its earnings per share increased by 29% [ $(\$1.01 - \$0.78) \div \$0.78$ ].

(c) To determine earnings per share, dividends on preferred stock are subtracted from net income, but dividends on common stock are not subtracted.



**EXERCISE 2-8**

(a)

**BARFIELD CORPORATION**  
**Income Statement**  
**For the Year Ended July 31, 2014**

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<b>Revenues</b>		
Service revenue.....	\$66,100	
Rent revenue .....	<u>8,500</u>	
Total revenues .....		\$74,600
<b>Expenses</b>		
Salaries and wages expense.....	57,500	
Supplies expense.....	15,600	
Depreciation expense .....	<u>4,000</u>	
Total expenses.....		<u>77,100</u>
Net loss .....		<u><u>\$ (2,500)</u></u>

**BARFIELD CORPORATION**  
**Retained Earnings Statement**  
**For the Year Ended July 31, 2014**

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Retained earnings, August 1, 2013.....		\$34,000
Less: Net loss .....	\$2,500	
Dividends .....	<u>4,000</u>	<u>6,500</u>
Retained earnings, July 31, 2014.....		<u><u>\$27,500</u></u>

(b)

**BARFIELD CORPORATION**  
**Balance Sheet**  
**July 31, 2014**

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<b>Assets</b>		
<b>Current assets</b>		
Cash.....	\$29,200	
Accounts receivable .....	<u>9,780</u>	
Total current assets .....		\$38,980
<b>Property, plant, and equipment</b>		
Equipment .....	18,500	
Less: Accumulated depreciation— equipment .....	<u>6,000</u>	<u>12,500</u>
Total assets.....		<u><u>\$51,480</u></u>

**EXERCISE 2-8 (Continued)**

**(b) BARFIELD CORPORATION  
Balance Sheet (Continued)  
July 31, 2014**

Liabilities and Stockholders' Equity		
<b>Current liabilities</b>		
Accounts payable .....	\$ 4,100	
Salaries and wages payable .....	<u>2,080</u>	
Total current liabilities.....		\$ 6,180
<b>Long-term liabilities</b>		
Notes payable .....		<u>1,800</u>
Total liabilities.....		7,980
<b>Stockholders' equity</b>		
Common stock.....	16,000	
Retained earnings.....	<u>27,500</u>	
Total stockholders' equity.....		<u>43,500</u>
Total liabilities and stockholders' equity .....		<u>\$51,480</u>

**(c) Current ratio =  $\frac{\$38,980}{\$6,180} = 6.3 : 1$**

**Debt to assets ratio =  $\frac{\$7,980}{\$51,480} = 15.5\%$**

**(d) The current ratio would not change because equipment is not a current asset and a 5-year note payable is a long-term liability rather than a current liability.**

**The debt to assets ratio would increase from 15.5% to 39.1%\*.**

**Looking solely at the debt to assets ratio, I would favor making the sale because Barfield's debt to assets ratio of 15.5% is very low. Looking at additional financial data, I would note that Barfield reported a significant loss for the current year which would lead me to question its ability to make interest and loan payments (and even remain in business) in the future. I would not make the proposed sale unless Barfield convinced me that it would be capable of earnings in the future rather than losses.**

**I would also consider making the sale but requiring a substantial down-payment and smaller note.**

**\* $(\$7,980 + \$20,000) \div (\$51,480 + \$20,000)$**

## EXERCISE 2-9

(a)	<u>Beginning of Year</u>	<u>End of Year</u>
Working capital	\$3,361 – \$1,635 = \$1,726	\$3,217 – \$1,601 = \$1,616
Current ratio	$\frac{\$3,361}{\$1,635} = 2.06:1$	$\frac{\$3,217}{\$1,601} = 2.01:1$

- (b) Nordstrom's liquidity decreased slightly during the year. Its current ratio decreased from 2.06:1 to 2.01:1. Also, Nordstrom's working capital decreased by \$110 million.
- (c) Nordstrom's current ratio at both the beginning and the end of the recent year exceeds Best Buy's current ratio for 2011 (and 2010). Nordstrom's end-of-year current ratio (2.01) exceeds Best Buy's 2011 current ratio (1.21\*). Nordstrom would be considered much more liquid than Best Buy for the recent year.

\*(see text, pg. 57)

## EXERCISE 2-10

(a)  $\text{Current ratio} = \frac{\$60,000}{\$30,000} = 2.0:1$

Working capital = \$60,000 – \$30,000 = \$30,000

(b)  $\text{Current ratio} = \frac{\$40,000^*}{\$10,000^{**}} = 4.0:1$

Working capital = \$40,000 – \$10,000 = \$30,000

\*\$60,000 – \$20,000

\*\*\$30,000 – \$20,000

- (c) Liquidity measures indicate a company's ability to pay current obligations as they become due. Satisfaction of current obligations usually requires the use of current assets.

If a company has more current assets than current liabilities it is more likely that it will meet obligations as they become due. Since working capital and the current ratio compare current assets to current liabilities, both are measures of liquidity.

## EXERCISE 2-10 (Continued)

Payment of current obligations frequently requires cash. Neither working capital nor the current ratio indicate the composition of current assets. If a company's current assets are largely comprised of items such as inventory and prepaid expenses it may have difficulty paying current obligations even though its working capital and current ratio are large enough to indicate favorable liquidity. In Grienke's case, payment of \$20,000 of accounts payable will leave only \$5,000 cash. Since salaries payable will require \$10,000, the company may need to borrow in order to make the required payment for salaries.

- (d) The CFO's decision to use \$20,000 of cash to pay off accounts payable is not in itself unethical. However, doing so just to improve the year-end current ratio could be considered unethical if this action misled creditors. Since the CFO requested preparation of a "preliminary" balance sheet before deciding to pay off the liabilities he seems to be "managing" the company's financial position, which is usually considered unethical.

## EXERCISE 2-11

	2014	2013
(a) Current ratio	$\frac{\$925,359}{\$401,763} = 2.30 : 1$	$\frac{\$1,020,834}{\$376,178} = 2.71 : 1$
(b) Earnings per share	$\frac{\$179,061}{205,169} = \$0.87$	$\frac{\$400,019}{216,119} = \$1.85$
(c) Debt to assets ratio	$\frac{\$554,645}{\$1,963,676} = 28.2\%$	$\frac{\$527,216}{\$1,867,680} = 28.2\%$
(d) Free cash flow	$\$302,193 - \$265,335 - \$82,394 = (\$45,536)$	$\$464,270 - \$250,407 - \$80,796 = \$133,067$

- (e) Using the debt to assets ratio and free cash flow as measures of solvency produces deteriorating results for American Eagle Outfitters. Its debt to assets ratio remained constant from 2013 to 2014. However, its free cash flow decreased by 134% indicating a significant decline in solvency.
- (f) In 2013 American Eagle Outfitters's cash provided by operating activities was greater than the cash used for capital expenditures. It was generating plenty of cash from operations to cover its investing needs. In 2014, American Eagle Outfitters experienced negative free cash flow. This deficiency could have been covered by issuing stock or debt.

## EXERCISE 2-12

- (a)   2   Going concern assumption
- (b)   6   Economic entity assumption
- (c)   3   Monetary unit assumption
- (d)   4   Periodicity assumption
- (e)   5   Historical cost principle
- (f)   1   Full disclosure principle

## EXERCISE 2-13

- (a) This is a violation of the historical cost principle. The inventory was written up to its fair value when it should have remained at cost.
- (b) This is a violation of the economic entity assumption. The treatment of the transaction treats Sal Garcia and Garcia Co. as one entity when they are two separate entities. The cash used to purchase the truck should have been treated as part of salaries and wages expense.
- (c) This is a violation of the periodicity assumption. This assumption states that the economic life of a business can be divided into artificial time periods (months, quarters, or a year). By adding two more weeks to the year, Garcia Co. would be misleading financial statement readers. In addition, 2014 results would not be comparable to previous years' results. The company should use a 52 week year.

# SOLUTIONS TO PROBLEMS

## PROBLEM 2-1A

**YAHOO! INC.**  
**Balance Sheet**  
**December 31, 2014**  
**(Amounts are in millions)**

Assets		
<b>Current assets</b>		
Cash.....	\$2,292	
Debt investments.....	1,160	
Accounts receivable.....	1,061	
Prepaid rent.....	<u>233</u>	
Total current assets.....		\$ 4,746
<b>Long-term investments</b>		
Stock investments.....		3,247
<b>Property, plant, and equipment</b>		
Equipment.....	1,737	
Less: Accumulated depreciation— equipment.....	<u>201</u>	1,536
<b>Intangible assets</b>		
Goodwill.....	3,927	
Patents.....	<u>234</u>	<u>4,161</u>
<b>Total assets.....</b>		<b><u>\$13,690</u></b>
Liabilities and Stockholders' Equity		
<b>Current liabilities</b>		
Accounts payable.....	\$ 152	
Unearned sales revenue.....	<u>413</u>	
Total current liabilities.....		\$ 565
<b>Long-term liabilities</b>		
Notes payable.....		<u>734</u>
Total liabilities.....		1,299
<b>Stockholders' equity</b>		
Common stock.....	6,283	
Retained earnings.....	<u>6,108</u>	
Total stockholders' equity.....		<u>12,391</u>
<b>Total liabilities and stockholders' equity.....</b>		<b><u>\$13,690</u></b>

**PROBLEM 2-2A**

**TRESH CORPORATION  
Income Statement  
For the Year Ended December 31, 2014**

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<b>Revenues</b>		
Service revenue .....		<b>\$68,000</b>
<b>Expenses</b>		
Salaries and wages expense .....	<b>\$37,000</b>	
Depreciation expense.....	<b>3,600</b>	
Insurance expense .....	<b>2,200</b>	
Utilities expense .....	<b>2,000</b>	
Maintenance and repairs expense.....	<b><u>1,800</u></b>	
Total expenses .....		<b><u>46,600</u></b>
<b>Net income.....</b>		<b><u><u>\$21,400</u></u></b>

**TRESH CORPORATION  
Retained Earnings Statement  
For the Year Ended December 31, 2014**

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<b>Retained earnings, January 1, 2014.....</b>	<b>\$31,000</b>
<b>Add: Net income .....</b>	<b><u>21,400</u></b>
	<b>52,400</b>
<b>Less: Dividends.....</b>	<b><u>12,000</u></b>
<b>Retained earnings, December 31, 2014 .....</b>	<b><u><u>\$40,400</u></u></b>

**PROBLEM 2-2A (Continued)**

**TRESH CORPORATION  
Balance Sheet  
December 31, 2014**

<b>Assets</b>		
<b>Current assets</b>		
Cash.....	\$10,100	
Accounts receivable.....	11,700	
Prepaid insurance.....	<u>3,500</u>	
Total current assets.....		\$25,300
<b>Property, plant, and equipment</b>		
Equipment.....	66,000	
Less: Accumulated depreciation—equipment...	<u>17,600</u>	<u>48,400</u>
<b>Total assets.....</b>		<b><u>\$73,700</u></b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities</b>		
Accounts payable.....	\$18,300	
Salaries and wages payable.....	<u>3,000</u>	
Total current liabilities.....		\$21,300
<b>Stockholders' equity</b>		
Common stock.....	12,000	
Retained earnings.....	<u>40,400</u>	
Total stockholders' equity.....		<u>52,400</u>
<b>Total liabilities and stockholders' equity.....</b>		<b><u>\$73,700</u></b>



<b>PROBLEM 2-3A</b>
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(a)

**RAMIREZ ENTERPRISES**  
**Income Statement**  
**For the Year Ended April 30, 2014**

<b>Sales revenue</b> .....		<b>\$5,100</b>
<b>Expenses</b>		
<b>Cost of goods sold</b> .....	<b>\$1,060</b>	
<b>Salaries and wages expense</b> .....	<b>700</b>	
<b>Interest expense</b> .....	<b>400</b>	
<b>Depreciation expense</b> .....	<b>335</b>	
<b>Insurance expense</b> .....	<b>210</b>	
<b>Income tax expense</b> .....	<b>165</b>	
<b>Total expenses</b> .....	<u><b>2,870</b></u>	
<b>Net income</b> .....		<u><b>\$2,230</b></u>

**RAMIREZ ENTERPRISES**  
**Retained Earnings Statement**  
**For the Year Ended April 30, 2014**

<b>Retained earnings, May 1, 2013</b> .....		<b>\$1,600</b>
<b>Add: Net income</b> .....		<u><b>2,230</b></u>
		<b>3,830</b>
<b>Less: Dividends</b> .....		<u><b>325</b></u>
<b>Retained earnings, April 30, 2014</b> .....		<u><b>\$3,505</b></u>

PROBLEM 2-3A (Continued)

(b) **RAMIREZ ENTERPRISES**  
**Balance Sheet**  
**April 30, 2014**

<b>Assets</b>			
<b>Current assets</b>			
Cash .....		\$1,270	
Stock investments.....		1,200	
Accounts receivable.....		810	
Inventory .....		967	
Prepaid insurance .....		<u>60</u>	
<b>Total current assets.....</b>			<b>\$4,307</b>
<b>Property, plant, and equipment</b>			
Land.....		3,100	
Equipment.....	\$2,420		
Less: Accumulated depreciation—equipment.....	<u>670</u>	<u>1,750</u>	<u>4,850</u>
<b>Total assets.....</b>			<b><u>\$9,157</u></b>

**Liabilities and Stockholders' Equity**

<b>Current liabilities</b>			
Notes payable.....		\$ 61	
Accounts payable .....		834	
Salaries and wages payable.....		222	
Income taxes payable .....		<u>135</u>	
<b>Total current liabilities .....</b>			<b>\$1,252</b>
Mortgage payable.....			<u>3,500</u>
<b>Total liabilities.....</b>			<b>4,752</b>
<b>Stockholders' equity</b>			
Common stock .....		900	
Retained earnings .....		<u>3,505</u>	
<b>Total stockholders' equity .....</b>			<b><u>4,405</u></b>
<b>Total liabilities and stockholders' equity .....</b>			<b><u>\$9,157</u></b>

**PROBLEM 2-4A**

- (a) Bosch Company's net income for 2014 is \$248,000 (\$1,800,000 – \$1,175,000 – \$283,000 – \$9,000 – \$85,000). Its earnings per share is \$3.10 (\$248,000 ÷ 80,000 shares outstanding). Fielder's net income for 2014 is \$142,200 (\$620,000 – \$340,000 – \$98,000 – \$3,800 – \$36,000). Its earnings per share is \$2.84 (\$142,200 ÷ 50,000 shares outstanding).
- (b) Bosch appears to be more liquid. Bosch's 2014 working capital of \$340,875 (\$407,200 – \$66,325) is more than twice as high as Fielder's working capital of \$156,620 (\$190,336 – \$33,716). In addition, Bosch's 2014 current ratio of 6.1:1 (\$407,200 ÷ \$66,325) is higher than Fielder's current ratio of 5.6:1 (\$190,336 ÷ \$33,716).
- (c) Bosch appears to be slightly more solvent. Bosch's 2014 debt to total assets ratio of 18.6% ( $\$174,825 \div \$939,200$ )<sup>a</sup> is lower than Fielder's ratio of 22.5% ( $\$74,400 \div \$330,064$ )<sup>b</sup>. The lower the percentage of debt to assets, the lower the risk is that a company may be unable to pay its debts as they come due.

Another measure of solvency, free cash flow, also indicates that Bosch is more solvent. Bosch had \$12,000 (\$138,000 – \$90,000 – \$36,000) of free cash flow while Fielder had only \$1,000 (\$36,000 – \$20,000 – \$15,000).

<sup>a</sup>\$174,825 (\$66,325 + \$108,500) is Bosch's 2014 total liabilities.  
\$939,200 (\$407,200 + \$532,000) is Bosch's 2014 total assets.

<sup>b</sup>\$74,400 (\$33,716 + \$40,684) is Fielder's 2014 total liabilities.  
\$330,064 (\$190,336 + \$139,728) is Fielder's 2014 total assets.

**PROBLEM 2-5A**

(a) (i) Working capital = \$458,900 – \$195,500 = \$263,400.

(ii) Current ratio =  $\frac{\$458,900}{\$195,500} = 2.35:1$ .

(iii) Free cash flow = \$190,800 – \$92,000 – \$31,000 = \$67,800

(iv) Debt to assets ratio =  $\frac{\$395,500}{\$1,034,200} = 38.2\%$ .

(v) Earnings per share =  $\frac{\$153,100}{50,000 \text{ shares}} = \$3.06$ .

(b) During 2014, the company's current ratio increased from 1.65:1 to 2.35:1 and its working capital increased from \$160,500 to \$263,400. Both measures indicate an improvement in liquidity during 2014.

The company's debt to assets ratio increased from 31.0% in 2013 to 38.2% in 2014 indicating that the company is less solvent in 2014. Another measure of solvency, free cash flow, increased from \$48,700 to \$67,800. This suggests an improvement in solvency, thus we have conflicting measures of solvency.

Earnings per share decreased from \$3.15 in 2013 to \$3.06 in 2014. This indicates a decline in profitability during 2014.

<b>PROBLEM 2-6A</b>
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	2013	2014
(a)	<b>Earnings per share.</b>  $\frac{\$60,000}{30,000 \text{ shares}} = \$2.00$	<b>Earnings per share.</b>  $\frac{\$70,000}{33,000 \text{ shares}} = \$2.12$
(b)	<b>Working capital.</b>  $(\$20,000 + \$62,000 + \$73,000) - \$70,000 = \$85,000$	<b>Working capital.</b>  $(\$28,000 + \$70,000 + \$90,000) - \$75,000 = \$113,000$
(c)	<b>Current ratio.</b>  $\frac{\$155,000}{\$70,000} = 2.2:1$	<b>Current ratio.</b>  $\frac{\$188,000}{\$75,000} = 2.5:1$
(d)	<b>Debt to assets ratio.</b>  $\frac{\$160,000}{\$685,000} = 23.4\%$	<b>Debt to assets ratio.</b>  $\frac{\$155,000}{\$760,000} = 20.4\%$
(e)	<b>Free cash flow.</b> $\$56,000 - \$38,000 - \$15,000 = \$3,000$	<b>Free cash flow.</b> $\$82,000 - \$45,000 - \$20,000 = \$17,000$
(f)	<b>Net income and earnings per share have increased, indicating that the underlying profitability of the corporation has improved. The liquidity of the corporation as shown by the working capital and the current ratio has improved slightly. Also, the corporation improved its solvency by improving its debt to assets ratio as well as free cash flow.</b>	

## PROBLEM 2-7A

Ratio	Target	Wal-Mart
	(All Dollars are in Millions)	
(a) Working capital	$\$17,488 - \$10,512 = \$6,976$	$\$48,949 - \$55,390 = (\$6,441)$
(b) Current ratio	1.66:1 ( $\$17,488 \div \$10,512$ )	.88:1 ( $\$48,949 \div \$55,390$ )
(c) Debt to assets ratio	68.9% ( $\$30,394 \div \$44,106$ )	60.0% ( $\$98,144 \div \$163,429$ )
(d) Free cash flow	$\$4,430 - \$3,547 - \$465$ = \$418	$\$23,147 - \$11,499 - \$3,746$ = \$7,902
(e) Earnings per share	$\$2.86 = \frac{\$2,214}{774}$	$\$3.39 = \frac{\$13,400}{3,951}$
(f) The comparison of the two companies shows the following:		

**Liquidity**—Target’s current ratio of 1.66:1 is much better than Wal-Mart’s .88:1 and Target has significantly higher working capital than Wal-Mart.

**Solvency**—Wal-Mart’s debt to assets ratio is about 13% less than Target’s and its free cash flow is much larger.

**Profitability**—Earnings per share should not be used to compare profitability between companies because of the difference in the number of shares outstanding. However, Wal-Mart’s profitability as measured by net income is more than 6-times that of Target.

## PROBLEM 2-8A

- (a) **Accounting information is the compilation and presentation of financial information for a company. It provides information in the form of financial statements and additional disclosures that is useful for decision making.**

**The accounting rules and practices that have substantial authoritative support and are recognized as a general guide for financial reporting purposes are referred to as generally accepted accounting principles (GAAP). The biotechnology company that employs Sue will follow GAAP to report its assets, liabilities, stockholders' equity, revenues, and expenses as it prepares financial statements.**

- (b) **Sue is correct in her understanding that the low success rate for new biotech products will be a cause of concern for investors. Her suggestion that detailed scientific findings be reported to prospective investors might offset some of their concerns but it probably won't conform to the qualitative characteristics of accounting information.**

**These characteristics consist of relevance, faithful representation, comparability, consistency, verifiability, timeliness, and understandability. They apply to accounting information rather than the scientific findings that Sue wants to include.**

<b>PROBLEM 2-1B</b>
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**STARBUCKS CORPORATION**  
**Balance Sheet**  
**September 30, 2014**  
(Amounts are in millions)

<b>Assets</b>		
<b>Current assets</b>		
Cash .....	\$281	
Debt investments .....	157	
Accounts receivable .....	288	
Inventory .....	692	
Prepaid rent .....	<u>278</u>	
Total current assets.....		\$1,696
<b>Long-term investments</b>		
Stock investments .....		280
<b>Property, plant and equipment</b>		
Equipment .....	3,036	
Less: Accumulated depreciation— equipment.....	<u>145</u>	2,891
<b>Intangible assets</b>		
Goodwill .....		<u>477</u>
<b>Total assets.....</b>		<b><u>\$5,344</u></b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities</b>		
Notes payable.....	\$ 1,468	
Accounts payable.....	391	
Unearned sales revenue .....	<u>297</u>	
Total current liabilities .....		\$2,156
<b>Long-term liabilities</b>		
Notes payable.....	550	
Bonds payable .....	<u>354</u>	
Total long-term liabilities .....		<u>904</u>
Total liabilities .....		3,060
<b>Stockholders' equity</b>		
Common stock .....	40	
Retained earnings .....	<u>2,244</u>	
Total stockholders' equity.....		<u>2,284</u>
<b>Total liabilities and stockholders' equity.....</b>		<b><u>\$5,344</u></b>



**PROBLEM 2-2B**

**MUELLER, INC.  
Income Statement  
For the Year Ended December 31, 2014**

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<b>Revenues</b>		
Service revenue .....		<b>\$51,000</b>
<b>Expenses</b>		
Salaries and wages expense .....	<b>\$34,000</b>	
Depreciation expense.....	<b>4,300</b>	
Maintenance and repairs expense.....	<b>2,600</b>	
Utilities expense .....	<b>2,100</b>	
Insurance expense .....	<b><u>1,800</u></b>	
Total expenses .....		<b><u>44,800</u></b>
<b>Net income.....</b>		<b><u><u>\$ 6,200</u></u></b>

**MUELLER, INC.  
Retained Earnings Statement  
For the Year Ended December 31, 2014**

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<b>Retained earnings, January 1 .....</b>	<b>\$14,000</b>
<b>Plus: Net income.....</b>	<b><u>6,200</u></b>
	<b>20,200</b>
<b>Less: Dividends.....</b>	<b><u>2,600</u></b>
<b>Retained earnings, December 31 .....</b>	<b><u><u>\$17,600</u></u></b>

**PROBLEM 2-2B (Continued)**

**MUELLER, INC.  
Balance Sheet  
December 31, 2014**

<b>Assets</b>		
<b>Current assets</b>		
Cash.....	\$ 6,100	
Accounts receivable.....	2,900	
Prepaid insurance.....	<u>2,400</u>	
Total current assets.....		<b>\$11,400</b>
<b>Property, plant, and equipment</b>		
Equipment.....	30,000	
Less: Accumulated depreciation.....	<u>7,600</u>	<u>22,400</u>
<b>Total assets.....</b>		<b><u>\$33,800</u></b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities</b>		
Accounts payable.....	\$ 7,200	
Salaries and wages payable.....	<u>3,000</u>	
Total current liabilities.....		<b>\$10,200</b>
<b>Stockholders' equity</b>		
Common stock.....	6,000	
Retained earnings.....	<u>17,600</u>	
Total stockholders' equity.....		<u>23,600</u>
<b>Total liabilities and stockholders' equity.....</b>		<b><u>\$33,800</u></b>

<b>PROBLEM 2-3B</b>
---------------------

(a)

**VERN CORPORATION**  
**Income Statement**  
**For the Year Ended April 30, 2014**

<b>Revenues</b>		
Sales revenue .....		<b>\$20,450</b>
<b>Expenses</b>		
Salaries and wages expense .....	\$5,840	
Depreciation expense .....	3,200	
Income tax expense .....	700	
Rent expense .....	660	
Interest expense .....	<u>350</u>	
<b>Total expenses .....</b>		<b><u>10,750</u></b>
<b>Net income .....</b>		<b><u>\$ 9,700</u></b>

**VERN CORPORATION**  
**Retained Earnings Statement**  
**For the Year Ended April 30, 2014**

Retained earnings, May 1, 2013.....		<b>\$13,960</b>
<b>Plus: Net income .....</b>		<b><u>9,700</u></b>
		<b>23,660</b>
<b>Less: Dividends.....</b>		<b><u>2,800</u></b>
<b>Retained earnings, April 30, 2014 .....</b>		<b><u>\$20,860</u></b>

**PROBLEM 2-3B (Continued)**

**(b)**

**VERN CORPORATION  
Balance Sheet  
April 30, 2014**

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<b>Assets</b>		
<b>Current assets</b>		
Cash .....	\$20,955	
Accounts receivable .....	10,150	
Prepaid rent .....	<u>380</u>	
Total current assets .....		\$31,485
Equipment.....	24,250	
Less: Accumulated depreciation— equipment .....	<u>6,600</u>	<u>17,650</u>
<b>Total assets .....</b>		<b><u>\$49,135</u></b>

**Liabilities and Stockholders' Equity**

<b>Current liabilities</b>		
Accounts payable.....	\$ 3,100	
Income taxes payable .....	300	
Interest payable .....	<u>175</u>	
Total current liabilities .....		\$ 3,575
Notes payable .....		<u>4,700</u>
Total liabilities .....		8,275
<b>Stockholders' equity</b>		
Common stock .....	20,000	
Retained earnings .....	<u>20,860</u>	
Total stockholders' equity .....		<u>40,860</u>
<b>Total liabilities and stockholders' equity .....</b>		<b><u>\$49,135</u></b>

**PROBLEM 2-4B**

- (a) Wise's net income is \$215,000 ( $\$900,000 - \$450,000 - \$150,000 - \$10,000 - \$75,000$ ).

Its earnings per share is \$.43 ( $\$215,000 \div 500,000$  shares).

Omaz's net income is \$74,000 ( $\$450,000 - \$225,000 - \$130,000 - \$6,000 - \$15,000$ ).

Its earnings per share is \$.37 ( $\$74,000 \div 200,000$  shares).

- (b) Wise's 2014 working capital of \$470,000 ( $\$700,000 - \$230,000$ ) is over 4 times as high as Omaz's working capital of \$105,000 ( $\$180,000 - \$75,000$ ). And Wise's 2014 current ratio of 3.0:1 ( $\$700,000 \div \$230,000$ ) is higher than Omaz's current ratio of 2.4:1 ( $\$180,000 \div \$75,000$ ).

- (c) Omaz appears to be less solvent. Omaz's 2014 debt to assets ratio of 34% ( $\$265,000 \div \$780,000$ )<sup>a</sup> is slightly higher than Wise's ratio of 29% ( $\$430,000 \div \$1,500,000$ )<sup>b</sup>. The lower the percentage of debt to assets, the lower the risk that a company may be unable to pay its debts as they come due.

Omaz's free cash flow is only \$26,000 ( $\$46,000 - \$20,000$ ) compared to \$125,000 ( $\$180,000 - \$50,000 - \$5,000$ ) for Wise. More free cash flow indicates that Wise will be better able to finance more capital expenditures without taking on more debt.

<sup>a</sup>\$265,000 ( $\$75,000 + \$190,000$ ) is Omaz's 2014 total liabilities.  
\$780,000 ( $\$180,000 + \$600,000$ ) is Omaz's 2014 total assets.

<sup>b</sup>\$430,000 ( $\$230,000 + \$200,000$ ) is Wise's 2014 total liabilities.  
\$1,500,000 ( $\$700,000 + \$800,000$ ) is Wise's 2014 total assets.

**PROBLEM 2-5B**

(a) (i) Current ratio =  $\frac{\$302,600}{\$148,700} = 2.0:1$ .

(ii) Working capital =  $\$302,600 - \$148,700 = \$153,900$ .

(iii) Debt to assets ratio =  $\frac{\$258,700}{\$763,900} = 34\%$ .

(iv) Free cash flow =  $\$61,300 - \$42,000 - \$10,000 = \$9,300$ .

(v) Earnings per share =  $\frac{\$99,200}{65,000} = \$1.53$ .

- (b) During 2014, Divine's current ratio decreased from 2.4:1 to 2.0:1 and its working capital dropped from \$178,000 to \$153,900. Both measures indicate a slight decline in liquidity during 2014.

Divine's debt to assets ratio increased from 31% in 2013 to 34% in 2014 indicating that the company is less solvent in 2014. Using another measure of solvency, free cash flow, we see that Divine's solvency has not improved during 2014. Earnings per share increased from \$1.35 to \$1.53 in 2014. This 13% increase indicates better profitability in 2014.

<b>PROBLEM 2-6B</b>
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	2013	2014
(a) Earnings per share.	$\frac{\$113,000}{320,000 \text{ shares}} = \$0.35$	$\frac{\$100,000}{370,000 \text{ shares}} = \$0.27$
(b) Working capital.	$(\$30,000 + \$55,000 + \$73,000) - \$65,000 = \$93,000$	$(\$50,000 + \$80,000 + \$74,000) - \$88,000 = \$116,000$
(c) Current ratio.	$\frac{\$158,000}{\$65,000} = 2.43:1$	$\frac{\$204,000}{\$88,000} = 2.32:1$
(d) Debt to assets ratio.	$\frac{\$135,000}{\$619,000} = 21.8\%$	$\frac{\$178,000}{\$802,000} = 22.2\%$
(e) Free cash flow.	$\$178,000 - \$45,000 - \$13,000 = \$120,000$	$\text{Free cash flow.}$ $\$165,000 - \$85,000 - \$20,000 = \$60,000$
(f)	<p>The underlying profitability of the corporation as measured by earnings per share has declined. The overall liquidity of the corporation has dropped as shown by the slight decrease in the current ratio. Also, the corporation appears to be increasing its debt burden as its debt to assets ratio increased slightly indicating a decrease in solvency. Comparing free cash flow, we find a drop in this measure of solvency also.</p>	

## PROBLEM 2-7B

Ratio	Home Depot	Lowe's
	(All Dollars are in Millions)	
(a) Working capital	$\$14,674 - \$12,706 = \$1,968$	$\$8,686 - \$7,751 = \$935$
(b) Current ratio	1.2:1 ( $\$14,674 \div \$12,706$ )	1.1:1 ( $\$8,686 \div \$7,751$ )
(c) Debt to assets ratio	60.0% ( $\$26,610 \div \$44,324$ )	47.9% ( $\$14,771 \div \$30,869$ )
(d) Free cash flow	$\$5,727 - \$3,558 - \$1,709$ = \$460	$\$4,347 - \$4,010 - \$428$ = (\$91)
(e) Earnings per share	$\$2.38 = \frac{\$4,395}{1,849}$	$\$1.90 = \frac{\$2,809}{1,481}$

(f) The comparison of the two companies shows the following:

**Liquidity**—Home Depot's current ratio of 1.2:1 is slightly better than Lowe's 1.1:1 and Home Depot has significantly higher working capital than Lowe's.

**Solvency**—Home Depot's debt to assets ratio is about 25% more than Lowe's but its free cash flow is much larger.

**Profitability**—Home Depot's earnings per share is about 25% higher than Lowe's.



**PROBLEM 2-8B**

- (a) The primary objective of financial reporting is to provide information useful for decision making. Since Yocum's shares appear to be actively traded, investors must be capable of using the information made available by Yocum to make decisions about the company.**
- (b) The investors must feel as if the company will show earnings in the future. They must recognize that information relevant to their investment choice is indicated by more than Yocum's net income.**
- (c) The change from Canadian dollars to U.S. dollars for reporting purposes should make Yocum's more comparable with companies traded on U.S. stock exchanges.**

- (a) The balance sheet reports the assets, liabilities, and stockholders' equity of a company at a specific date. The income statement presents the revenues and expenses and resulting net income or net loss of a company for a specific period of time. The retained earnings statement summarizes the changes in retained earnings for a specific period of time. Finally, the cash flow statement provides information about the cash inflows and cash outflows for a specific period of time.
- (b) By looking at the balance sheet and the cash flow statement and calculating liquidity ratios, we can measure a company's short term ability to pay its obligations. Liquidity ratios include the calculation of working capital (current assets minus current liabilities) and current ratio (current assets divided by current liabilities).
- (c) By looking at the balance sheet and the cash flow statement and calculating solvency ratios we are able to measure a company's ability to survive over a long period of time. These solvency ratios include debt to assets (total liabilities divided by total assets) and free cash flow (cash provided by operations minus dividends paid and capital expenditures).
- (d) By looking at the income statement we can determine if Biscuits is profitable. If revenues earned by Biscuits exceed expenses incurred, then Biscuits is profitable. Profitability ratios can measure a company's ability to generate earnings over a period of time. One profitability ratio is earnings per share (net income minus preferred dividends divided by average common shares outstanding).
- (e) By looking at the balance sheet we can determine if Biscuits has any debt. By looking at the balance sheet and cash flow statement and calculating solvency ratios we are able to determine whether a company has the ability to repay its long-term debt. Profitability ratios will help in determining whether a company is able to pay its interest expense. The more profitable the company the better able it is to repay its long-term obligations as well as the amount of interest it is paying on its debt.

## **CONTINUING COOKIE CHRONICLE (Continued)**

- (f) By looking at the statement of cash flows we can determine whether Biscuits has paid any dividends to its shareholders.**
  
- (g) Be aware that financial statements of Biscuits provide a historical perspective of what has already taken place. The financial statements may prove to be a good indicator of what will happen in the future but remember that is not necessarily guaranteed. Consumer tastes change and as a result the demand for Biscuits' product may also change.**

**There are other issues that Natalie must consider as well. Does she have the ability to meet the demands of Biscuits? Will she be able to produce 1,500 dozen cookies a week? Does she have enough staff to enable her to do so? Does she have a large enough oven to do so? Does she have enough cash to pay her staff, purchase supplies, and cover operating expenses until she receives payment from Biscuits?**

- (a) Total current assets were \$212,201,000 at December 31, 2011, and \$235,167,000 at December 31, 2010.**
- (b) Current assets are properly listed in the order of liquidity. As you will learn in a later chapter, inventories are considered to be less liquid than receivables. Thus, they are listed below receivables and before prepaid expenses.**
- (c) The asset classifications are similar to the text: (a) current assets, (b) property, plant, and equipment, and (c) other assets.**
- (d) Total current liabilities were \$58,355,000 at December 31, 2011, and \$58,505,000 at December 31, 2010.**

(a)	(\$ in thousands)	Hershey Company	Tootsie Roll
1.	Working capital	$\$2,046,558 - \$1,173,775 = \$872,783$	$\$212,201 - \$58,355 = \$153,846$
2.	Current ratio	$\$2,046,558 \div \$1,173,775 = 1.7:1$	$\$212,201 \div \$58,355 = 3.6:1$
3.	Debt to assets ratio	$\frac{\$3,539,551}{\$4,412,199} = 80.2\%$	$\frac{\$191,921^*}{\$857,856} = 22.4\%$
4.	Free cash flow	$\$580,867 - \$323,961 - \$304,083 = (\$47,177)$	$\$50,390 - \$16,351 - \$18,407 = \$15,632$
5.	Earnings per share	$\frac{\$628,962 - 0}{220,688} = \$2.85$	$\frac{\$43,938 - 0}{57,892} = \$0.76$

\*\$58,355 + \$133,566

(b) **Liquidity**

Hershey Company appears much more liquid since it has about \$719 million more working capital than Tootsie Roll. But, looking at the current ratios, we see that Tootsie Roll's ratio is more than two times as large as Hershey's.

**Solvency**

Based on the debt to assets ratio, Tootsie Roll is more solvent. Tootsie Roll's debt to assets ratio is significantly lower than Hershey's and, therefore, Tootsie Roll would be considered better able to pay its debts as they come due.

Comparing free cash flow, Tootsie Roll generates much more excess cash than Hershey—\$15.6 million versus negative free cash flow of \$47 million.

**Profitability**

While earnings per share cannot be used to compare profitability between companies, Hershey's net income is more than 14-times as great as Tootsie Roll's.

- (a) Many large companies, big accounting firms, and accounting standard setters tend to favor a switch to IFRS because they believe that global accounting standards would save companies money by consolidating their bookkeeping. They also believe it would make it easier to raise capital around the world. In addition, investors would have less trouble comparing companies from different countries. They also feel that having international accounting standards would lead to an improvement in the enforcement of securities laws.
- (b) Many small companies are opposed to switching to IFRS because (1) they say that the switch would be very costly, and (2) because they don't have operations outside of the U.S., so they see any benefit to their company of using international standards.
- (c) It has been suggested that IFRS lacks standards that are specific to utility companies that U.S. GAAP contains.
- (d) Condorsement (a word invented by the SEC) represents a combination of convergence and endorsement. Under condorsement, U.S. standard setters would continue to work with international standard setters to try to reduce differences in standards. In addition, as new international standards are issued, U.S. standard setters would review those standards and consider whether to endorse them by absorbing them into U.S. GAAP.

- (a) The percentage decrease in Gap's total assets during this period is calculated as:

$$\frac{\$7,065 - \$8,544}{\$8,544} = 17.3\%$$

The average decrease per year can be approximated as:

$$\frac{17.3\%}{4 \text{ years}} = 4.3\% \text{ per year}$$

- (b) Gap's working capital and current ratio decreased (2007), increased (2008 and 2009) and then decreased (2010) during this period, indicating a decline, an improvement and then another decline in liquidity. The current ratio is a better measure of liquidity because it provides a relative measure; that is, current assets compared to current liabilities. Working capital only tells us the net amount of current assets less current liabilities. It is hard to say whether a given amount of working capital is adequate or inadequate without knowing the size of the company.
- (c) The debt to assets ratio suggests that Gap's solvency didn't change much during the period. Debt to assets was .39 in 2006, rose to .45 in 2007 and then came back down to .42 in 2010.
- (d) The earnings per share suggests that Gap's profitability improved significantly from 2006 to 2010, increasing from \$0.94 to \$1.89. However, based on the years shown, it appears that earnings varied a great deal during this period.

## REAL-WORLD FOCUS

### **BYP 2-5**

**Answers will vary depending on the company chosen and the date.**

### **BYP 2-6**

**Answers will vary depending on the company chosen and the date.**



The current ratio increase is a favorable indication as to liquidity, but alone tells little about the prospects of the client. From this ratio change alone, it is impossible to know the amount and direction of the changes in individual accounts, total current assets, and total current liabilities. Also unknown are the reasons for the changes.

The working capital increase is also a favorable indication as to liquidity, but again the amount and direction of the changes in individual current assets and current liabilities cannot be determined from this measure.

The increase in free cash flow is a favorable indicator for solvency. An increase in free cash flow means the company can replace assets, pay dividends, and have “free cash” available to pay down debt or expand operations.

The decrease in the debt to assets ratio is a favorable indicator for solvency and going-concern prospects. The lower the percentage of debt to assets, the lower the risk that a company may be unable to pay its debts as they come due. A decline in the debt to assets ratio is also a positive sign regarding going-concern potential.

The increase in net income is a favorable indicator for both solvency and profitability prospects although much depends on the quality of receivables generated from sales and how quickly they can be converted into cash. A significant factor here may be that despite a decline in sales the client’s management has been able to reduce costs to produce this increase. Indirectly, the improved income picture may have a favorable impact on solvency and going-concern potential by enabling the client to borrow currently to meet cash requirements.

The earnings per share increase is a favorable indicator for profitability. A 109% (from \$1.15 to \$2.40) increase indicates a significant increase in net income and provides a favorable sign regarding going-concern potential.

**To:** F. P. Ferneti  
**From:** Accounting Major  
**Subject:** Financial Statement Analysis

(a) Ratios can be classified into three types, which measure three different aspects of a company's financial health:

1. **Liquidity ratios**—These measure a company's ability to pay its current obligations.
2. **Solvency ratios**—These measure a company's ability to pay its long-term obligations and survive over the long-term.
3. **Profitability ratios**—These measure the ability of the company to generate a profit.

(b) 1. Examples of liquidity measures are:

**Working capital = Current assets – Current liabilities**

**Current ratio =  $\frac{\text{Current assets}}{\text{Current liabilities}}$**

2. Examples of solvency measures are:

**Debt to assets ratio =  $\frac{\text{Total liabilities}}{\text{Total assets}}$**

**Free cash flow = Cash provided by operating activities –  
Capital expenditures – Cash dividends**

## BYP 2-8 (Continued)

### 3. Example of profitability measure:

$$\text{Earnings per share} = \frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common shares outstanding}}$$

### (c) There are three bases for comparing a company's results:

The bases of comparison are:

1. **Intracompany**—This basis compares an item or financial relationship within a company in the current year with the same item or relationship in one or more prior years.
2. **Industry averages**—This basis compares an item or financial relationship of a company with industry averages (or norms).
3. **Intercompany**—This basis compares an item or financial relationship of one company with the same item or relationship in one or more competing companies.

- (a) The stakeholders in this case are: Boeing's management; CEO, public relations manager, Boeing's stockholders, McDonnell Douglas stockholders, other users of the financial statements; especially potential investors of the new combined company.
- (b) The ethical issues center around full disclosure of financial information. Management attempted to "time" the release of bad news in order to complete a merger that would have been revoked if cost overruns had been disclosed as soon as management became aware of them.
- (c) The periodicity assumption requires that financial results be reported on specific, pre-determined dates.  
The full disclosure principle requires that all circumstances and events that make a difference to financial statement users must be disclosed.
- (d) It is not ethical to "time" the release of bad news. GAAP requires that all significant financial information be released to allow users to make informed decisions.
- (e) Answers will vary. One possibility: Release the information regarding cost overruns as it became available. Describe the causes of such overruns and explain how Boeing would address them (probably by improving production methods to eliminate the inefficiencies alluded to in the text).
- (f) Investors and analysts should be aware that Boeing's management will probably "manage" information in the future in ways that will interfere with full disclosure.

**Answers will vary.**

- (a) 1. **Current assets** is used to designate cash and other assets or resources commonly identified as those that are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.
2. **Current liabilities** is used principally to designate 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.

(b) **Access FASB Codification 210-20-45**

A right of set off exists when all of the following conditions are met:

1. Each of two parties owes the other determinable amounts.
2. The reporting party has the right to set off the amount owed with the amount owed by the other party.
3. The reporting party intends to set off.
4. The right of set off is enforceable at law. As a result, a company may not offset accounts payable against cash on its balance sheet.

- (a) The existence of three different forms of certification would most likely create confusion for coffee purchasers. It would be difficult to know what aspects of the coffee growing process each certification covered. Similarly, if there were multiple groups that certified financial statements, each with different criteria, it would be difficult for financial statement users to know what each certification promised.
- (b) The Starbucks certification appears to be the most common in that area. It has the advantage of having a direct link to the Starbucks coffee market. Although it does not guarantee that Starbucks will buy its coffee, it is a requirement that must be met before Starbucks will buy somebody's coffee. Note that the article states that the Starbucks certification "incorporates elements of social responsibility and environmental leadership, but quality of coffee is the first criteria." The Smithsonian Bird Friendly is considered to have the strictest requirements and, as a result, appears to be the least common.
- (c) The certifications have multiple objectives including organic farming as a means to protect bird species, biodiversity and wildlife habitat. Some included requirements are to improve workers' living conditions, such as providing running water in worker housing, child labor regulations and education requirements. As mentioned above, the Starbucks certification has the potential financial benefit of making Starbucks a potential customer, which can stabilize farmers' earnings. Certifications can also be financially beneficial because companies can benefit from the positive public relations effects of either producing or buying coffee produced using sustainable practices.

**IFRS 2-1**

The statement of financial position required under IFRS and the balance sheet prepared under GAAP usually present the same information regarding a company's assets, liabilities, and stockholders' equity at a point in time. IFRS does not dictate a specific order but most companies list noncurrent items before current. Differences in ordering are

Statement of Financial Position presentation	Balance Sheet presentation
Noncurrent assets	Current assets
Current assets	Noncurrent assets
Equity	Current liabilities
Noncurrent liabilities	Noncurrent liabilities
Current liabilities	Stockholders' equity

Under IFRS, current assets are usually listed in the reverse order of liquidity.

**IFRS 2-2**

No, in a recently completed project on the conceptual framework, the two boards agreed on the objective of financial reporting and a common set of desired qualitative characteristics.

**IFRS 2-3**

IFRS uses Share Capital—Ordinary rather than Common Stock and statement of financial position rather than balance sheet.



IFRS 2-4

**RUIZ COMPANY**  
**Partial Statement of Financial Position**

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<b>Current assets</b>	
Prepaid insurance.....	£ 3,600
Supplies .....	5,200
Accounts receivable.....	12,500
Debt investments.....	6,700
Cash.....	<u>15,400</u>
Total .....	<u>£43,400</u>

IFRS 2-5

**WIDMER COMPANY**  
**Partial Statement of Financial Position**  
**December 31, 2014**

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<b>Property, plant and equipment</b>		
Equipment.....	CHF21,700	
Less: Accumulated depreciation.....	<u>5,700</u>	CHF16,000
<b>Long-term investments</b>		
Share investments.....		6,500
<b>Current assets</b>		
Inventories .....	2,900	
Accounts receivable.....	4,300	
Debt investments.....	120	
Cash.....	<u>13,400</u>	<u>20,720</u>
<b>Total assets .....</b>		<u>CHF43,220</u>

**COLE BOWLING ALLEY**  
**Statement of Financial Position**  
**December 31, 2014**

Assets			
<b>Property, plant, and equipment</b>			
Land .....		\$64,000	
Buildings .....	\$128,800		
Less: Acc. depr.—buildings.....	42,600	86,200	
Equipment .....	62,400		
Less: Acc. depr.—equipment.....	18,720	43,680	\$193,880
<b>Current assets</b>			
Prepaid insurance.....		4,680	
Accounts receivable .....		14,520	
Cash.....		18,040	37,240
<b>Total assets .....</b>			<b>\$231,120</b>

Equity and Liabilities			
<b>Equity</b>			
Share capital—ordinary.....	\$100,000		
Retained earnings (\$15,000 + \$3,440*) .....	18,440		\$118,440
<b>Non-current liabilities</b>			
Notes payable .....			83,880
<b>Current liabilities</b>			
Current portion of notes payable.....	13,900		
Accounts payable .....	12,300		
Interest payable .....	2,600		28,800
<b>Total equity and liabilities.....</b>			<b>\$231,120</b>

\*Net income = \$14,180 – \$780 – \$7,360 – \$2,600 = \$3,440

## IFRS 2-7

It is possible to compare liquidity and solvency for companies using different currencies. The ratios that are used to do so, such as the current ratio and debt to total assets, indicate relative amounts of assets and liabilities rather than absolute monetary values.

**IFRS 2-8 INTERNATIONAL COMPARATIVE ANALYSIS PROBLEM**

Differences in the format of the statement of financial position (balance sheet) used by Zetar and Tootsie Roll include the following:

	<b>Zetar</b>	<b>Tootsie Roll</b>
1.	<b>Non-current assets listed first</b>	<b>Current assets listed first</b>
2.	<b>Goodwill listed before property, plant and equipment</b>	<b>Property, plant, and equipment listed before goodwill</b>
3.	<b>Current assets are shown in reverse order of liquidity with cash being last</b>	<b>Current assets are shown in order of liquidity with cash being first</b>
4.	<b>Current liabilities are subtracted from current assets to show net current liabilities/assets</b>	<b>No similar amount appears</b>
5.	<b>Total liabilities are subtracted from total assets to show net assets</b>	<b>No similar amount appears</b>
6.	<b>The equity section uses Share capital and Share premium</b>	<b>The equity section uses Common stock and Capital in excess of par value</b>
7.	<b>Reporting currency is £ (pounds)</b>	<b>Reporting currency is \$ (dollars)</b>

