

CHAPTER 2

A Further Look at Financial Statements

Study Objectives

1. Identify the sections of a classified balance sheet.
2. Identify and compute ratios for analyzing 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 Study Objectives and Bloom's Taxonomy

Item	SO	BT	Item	SO	BT	Item	SO	BT	Item	SO	BT	Item	SO	BT
Questions														
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												
Brief Exercises														
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									
Do It! Review Exercises														
1.	1	AP	2.	1	AP	3.	4, 5	K	4.	7	K			
Exercises														
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						
Problems: Set A														
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						
Problems: Set 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

Problem Number	Description	Difficulty Level	Time Allotted (min.)
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) Julia 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 total 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 total 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 total 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. Gross 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 two constraints are materiality and cost. The materiality constraint means that an item may be so small that failure to follow generally accepted accounting principles will not influence the decision of a reasonably prudent investor or creditor. 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 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, 2009 Tootsie Roll's largest current asset was Cash and Cash Equivalents of \$90,900, its largest current liability is accrued liabilities of \$42,468 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

GEORGES COMPANY Partial Balance Sheet

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

BRIEF EXERCISE 2-3

$$\begin{aligned}\text{Earnings per share} &= \frac{\text{Net income - Preferred stock dividends}}{\text{Average common shares outstanding}} \\ &= \frac{\text{[REDACTED]}}{\text{[REDACTED]}} = \$0.66 \text{ per share}\end{aligned}$$

BRIEF EXERCISE 2-4

<u>ICS</u>	Issued new shares of common stock
<u>DRE</u>	Paid a cash dividend
<u>IRE</u>	Reported net income of \$75,000
<u>DRE</u>	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:

$$\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\text{---}}{\text{---}}$$
$$= .51:1$$

BRIEF EXERCISE 2-6

(a) Current ratio $\frac{\text{---}}{\text{---}} = 0.89:1$

(b) Debt to total 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) Complete.
- (d) Free from error.
- (e) Comparability.
- (f) Verifiability.
- (g) 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

HEATHER CORPORATION
Balance Sheet (partial)
December 31, 2012

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

DO IT! 2-2

<u>IA</u>	Trademarks	<u>CA</u>	Inventory
<u>CL</u>	Current maturities of long-term debt	<u>PPE</u>	Accumulated depreciation
<u>NA</u>	Interest revenue	<u>PPE</u>	Land improvements
<u>CL</u>	Income taxes payable	<u>SE</u>	Common stock
<u>LTI</u>	Long-term marketable debt securities	<u>NA</u>	Advertising expense
<u>CL</u>	Unearned consulting fees	<u>LTL</u>	Mortgage payable (due in 3 years)

DO IT! 2-3

(a)	<u>2012</u>	<u>2011</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

Gerard'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 2012. Earnings per share should not be compared across companies because the number of shares issued by companies varies widely. Thus, we cannot conclude that Gerard Corporation is more profitable than Thorpe Corporation based on its higher EPS in 2012.

(b)	<u>2012</u>	<u>2011</u>
Current ratio	$\frac{\$54,000}{\$22,000} = 2.45:1$	$\frac{\$36,000}{\$30,000} = 1.20:1$
Debt to total 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 total assets ratio declined from 49% to 30%.

(c)	
Free cash flow	2012: $\$90,000 - \$6,000 - \$3,000 - \$27,000 = \$54,000$ 2011: $\$56,000 - \$6,000 - \$1,500 - \$12,000 = \$36,500$

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. Cost principle**
- 7. Relevance**
- 8. Periodicity assumption**
- 9. Full disclosure principle**
- 10. Materiality constraint**
- 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>LTI</u>	Investments
<u>PPE</u>	Accumulated depreciation—equipment	<u>PPE</u>	Land
<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, 2009
(in millions)

Assets		
Current assets		
Cash and cash equivalents.....	\$ 9,215	
Short-term investments.....	2,008	
Accounts receivable.....	5,785	
Notes receivable—due before December 31, 2010.....	368	
Inventories.....	16,933	
Other current assets.....	<u>966</u>	
Total current assets.....		\$35,275
Notes receivable—due after December 31, 2010.....		5,466
Property, plant, and equipment.....	21,579	
Less: Accumulated depreciation.....	<u>12,795</u>	8,784
Intangible assets and other assets.....		<u>12,528</u>
Total assets.....		<u>\$62,053</u>

EXERCISE 2-4

H. J. HEINZ COMPANY
Partial Balance Sheet
April 29, 2009
(in thousands)

Assets			
Current assets			
Cash and cash equivalents.....		\$ 373,145	
Accounts receivable.....		1,171,797	
Inventories.....		1,237,613	
Prepaid expenses.....		125,765	
Other current assets.....		<u>36,701</u>	
Total current assets.....			\$ 2,945,021
Property, plant, and equipment			
Land.....		76,193	
Buildings and equipment.....	\$4,033,369		
Less: Accumulated depreciation.....	<u>2,131,260</u>	<u>1,902,109</u>	1,978,302
Intangible assets.....			3,982,954
Other noncurrent assets.....			<u>757,907</u>
Total assets.....			<u>\$ 9,664,184</u>

EXERCISE 2-5

VICTORY COMPANY
Balance Sheet
December 31, 2012

Assets			
Current assets			
Cash.....		\$11,840	
Accounts receivable.....		12,600	
Prepaid insurance.....		<u>3,200</u>	
Total current assets.....			\$ 27,640
Property, plant, and equipment			
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>
Total assets.....			<u>\$212,720</u>
Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable.....		\$ 9,500	
Current maturity of note payable.....		13,600	
Interest payable.....		<u>3,600</u>	
Total current liabilities.....			\$ 26,700
Long-term liabilities			
Note payable (\$93,600 – \$13,600).....			<u>80,000</u>
Total liabilities.....			106,700
Stockholders' equity			
Common stock.....		60,000	
Retained earnings (\$40,000 + \$6,020*).....		<u>46,020</u>	
Total stockholders' equity.....			<u>106,020</u>
Total liabilities and stockholders' equity.....			<u>\$212,720</u>

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

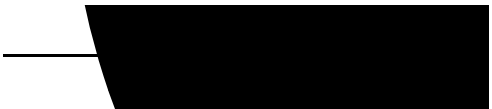
EXERCISE 2-6

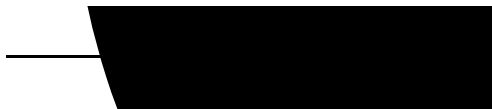
TEXAS INSTRUMENTS, INC. Balance Sheet December 31, 2009 (in millions)

Assets			
Current assets			
Cash and cash equivalents.....	\$	1,182	
Short-term investments.....		1,743	
Accounts receivable.....		1,277	
Inventories.....		1,202	
Prepaid expenses.....		164	
Other current assets.....		<u>546</u>	
Total current assets.....			\$ 6,114
Long-term investments.....			637
Property, plant, and equipment			
Property, plant, and equipment.....		6,705	
Less: Accumulated depreciation.....		<u>(3,547)</u>	3,158
Other noncurrent assets.....			<u>2,210</u>
Total assets.....			<u><u>\$12,119</u></u>
Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable.....	\$	1,344	
Income taxes payable.....		128	
Other current liabilities.....		<u>115</u>	
Total current liabilities.....			\$ 1,587
Long-term liabilities			
Noncurrent liabilities.....			<u>810</u>
Total liabilities.....			2,397
Stockholders' equity			
Common stock.....		2,826	
Retained earnings.....		<u>6,896</u>	
Total stockholders' equity.....			<u>9,722</u>
Total liabilities and stockholders' equity.....			<u><u>\$12,119</u></u>

EXERCISE 2-7

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

2008 :  = \$ 1.01

2007 :  = \$.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 2007 and 2008. 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)**

WHITNALL CORPORATION
Income Statement
For the Year Ended July 31, 2012

Revenues		
Service revenue.....	\$66,100	
Rent revenue.....	<u>8,500</u>	
Total revenues.....		\$74,600
Expenses		
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>\$ (2,500)</u>

WHITNALL CORPORATION
Retained Earnings Statement
For the Year Ended July 31, 2012

Retained earnings, August 1, 2011.....		\$34,000
Less: Net loss.....	\$2,500	
Dividends.....	<u>4,000</u>	<u>6,500</u>
Retained earnings, July 31, 2012.....		<u>\$27,500</u>

(b)

WHITNALL CORPORATION
Balance Sheet
July 31, 2012

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

EXERCISE 2-8 (Continued)

(b) **WHITNALL CORPORATION**
Balance Sheet (Continued)
July 31, 2012

Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable.....	\$ 4,100		
Salaries and wages payable.....	<u>2,080</u>		
Total current liabilities.....		\$ 6,180	
Long-term liabilities			
Notes payable.....		<u>1,800</u>	
Total liabilities.....		7,980	
Stockholders' equity			
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)

(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 total assets ratio would increase from 15.5% to 39.1%*.

Looking solely at the debt to total assets ratio, I would favor making the sale because Whitnall's debt to total assets ratio of 15.5% is very low. Looking at additional financial data, I would note that Whitnall 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 Whitnall 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	$\frac{\text{---}}{\text{---}} = 2.06:1$	$\frac{\text{---}}{\text{---}} = 2.01:1$

- (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 2009 (and 2008). Nordstrom's end-of-year current ratio (2.01) exceeds Best Buy's 2009 current ratio (0.97). Nordstrom would be considered much more liquid than Best Buy for the recent year.

EXERCISE 2-10

(a)

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

(b)

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 Padilla'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

	2009	2008
(a) Debt to total assets ratio	 = 28.2%	 = 28.2%
(b) Free cash flow	\$302,193 – \$265,335 – \$82,394 = (\$45,536)	\$464,270 – \$250,407 – \$80,796 = \$133,067

- (c) Using the debt to total assets ratio and free cash flow as measures of solvency produces deteriorating results for American Eagle Outfitters. Its debt to total assets ratio remained constant from 2008 to 2009. However, its free cash flow decreased by 134% indicating a significant decline in solvency.
- (d) In 2008 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 2009, 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 Cost principle
- (f) 1 Full disclosure principle

EXERCISE 2-13

- (a) This is a violation of the 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 Jay Rosman and Rosman 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 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, Rosman Co. would be misleading financial statement readers. In addition, 2012 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, 2008 (Amounts are in thousands)

Assets		
Current assets		
Cash and cash equivalents.....	\$ 2,292,296	
Short-term investments.....	1,159,691	
Accounts receivable.....	1,060,450	
Prepaid expenses and other current assets.....	<u>233,061</u>	
Total current assets.....		\$ 4,745,498
Long-term investments.....		3,247,431
Property and equipment, net.....		1,536,181
Intangible assets.....		3,926,749
Other assets.....		<u>233,989</u>
Total assets.....		<u>\$13,689,848</u>
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable.....	\$ 151,897	
Accrued expenses and other current liabilities.....	1,139,894	
Unearned revenue-current.....	<u>413,224</u>	
Total current liabilities.....		\$ 1,705,015
Long-term liabilities		
Long-term debt.....		<u>733,891</u>
Total liabilities.....		2,438,906
Stockholders' equity		
Common stock.....	6,282,504	
Retained earnings.....	<u>4,968,438</u>	
Total stockholders' equity.....		<u>11,250,942</u>
Total liabilities and stockholders' equity.....		<u>\$13,689,848</u>

PROBLEM 2-2A

XENOX CORPORATION
Income Statement
For the Year Ended December 31, 2012

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

XENOX CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2012

Retained earnings, January 1, 2012.....	\$31,000
Add: Net income.....	<u>21,400</u>
	52,400
Less: Dividends.....	<u>12,000</u>
Retained earnings, December 31, 2012.....	<u>\$40,400</u>

PROBLEM 2-2A (Continued)

XENOX CORPORATION
Balance Sheet
December 31, 2012

Assets

Current assets

Cash.....	\$10,100	
Accounts receivable.....	11,700	
Prepaid insurance.....	<u>3,500</u>	
Total current assets.....		\$25,300

Property, plant, and equipment

Equipment.....	66,000	
Less: Accumulated depreciation—equipment...	<u>17,600</u>	<u>48,400</u>
Total assets.....		<u>\$73,700</u>

Liabilities and Stockholders' Equity

Current liabilities

Accounts payable.....	\$18,300	
Salaries and wages payable.....	<u>3,000</u>	
Total current liabilities.....		\$21,300

Stockholders' equity

Common stock.....	12,000	
Retained earnings.....	<u>40,400</u>	
Total stockholders' equity.....		<u>52,400</u>
Total liabilities and stockholders' equity.....		<u>\$73,700</u>

PROBLEM 2-3A

(a)

MERRELL ENTERPRISES
Income Statement
For the Year Ended April 30, 2012

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

MERRELL ENTERPRISES
Retained Earnings Statement
For the Year Ended April 30, 2012

Retained earnings, May 1, 2011.....	\$1,600
Add: Net income.....	<u>2,230</u>
	3,830
Less: Dividends.....	<u>325</u>
Retained earnings, April 30, 2012.....	<u>\$3,505</u>

PROBLEM 2-3A (Continued)

**(b) MERRELL ENTERPRISES
Balance Sheet
April 30, 2012**

Assets			
Current assets			
Cash.....		\$1,270	
Short-term investments.....		1,200	
Accounts receivable.....		810	
Inventory.....		967	
Prepaid insurance.....		<u>60</u>	
Total current assets.....			\$4,307
Property, plant, and equipment			
Land.....		3,100	
Equipment.....	\$2,420		
Less: accumulated depreciation—equipment.....	<u>670</u>	<u>1,750</u>	
Total property, plant, and equipment.....			<u>4,850</u>
Total assets.....			<u>\$9,157</u>
Liabilities and Stockholders' Equity			
Current liabilities			
Notes payable.....		\$ 61	
Accounts payable.....		834	
Salaries and wages payable.....		222	
Income taxes payable.....		<u>135</u>	
Total current liabilities.....			\$1,252
Mortgage payable.....			<u>3,500</u>
Total liabilities.....			4,752
Stockholders' equity			
Common stock.....		900	
Retained earnings.....		<u>3,505</u>	
Total stockholders' equity.....			<u>4,405</u>
Total liabilities and stockholders' equity.....			<u>\$9,157</u>

PROBLEM 2-4A

- (a) Duran Company's net income for 2012 is \$248,000 ($\$1,800,000 - \$1,175,000 - \$283,000 - \$9,000 - \$85,000$). Its earnings per share is \$3.10 ($\$248,000 \div 80,000$ shares outstanding). Kiepert's net income for 2012 is \$142,200 ($\$620,000 - \$340,000 - \$98,000 - \$3,800 - \$36,000$). Its earnings per share is \$2.84 ($\$142,200 \div 50,000$ shares outstanding).
- (b) Duran appears to be more liquid. Duran's 2012 working capital of \$340,875 ($\$407,200 - \$66,325$) is more than twice as high as Kiepert's working capital of \$156,620 ($\$190,336 - \$33,716$). In addition, Duran's 2012 current ratio of 6.1:1 ($\$407,200 \div \$66,325$) is higher than Kiepert's current ratio of 5.6:1 ($\$190,336 \div \$33,716$).
- (c) Duran appears to be slightly more solvent. Duran's 2012 debt to total assets ratio of 18.6% ($\$174,825 \div \$939,200$)^a is lower than Kiepert's ratio of 22.5% ($\$74,400 \div \$330,064$)^b. The lower the percentage of debt to total assets, the lower the risk that a company may be unable to pay its debts as they come due.

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

^a\$174,825 ($\$66,325 + \$108,500$) is Duran's 2012 total liabilities.
\$939,200 ($\$407,200 + \$532,000$) is Duran's 2012 total assets.

^b\$74,400 ($\$33,716 + \$40,684$) is Kiepert's 2012 total liabilities.
\$330,064 ($\$190,336 + \$139,728$) is Kiepert's 2012 total assets.

PROBLEM 2-5A

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

(ii) Current ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$ = 2.35:1.

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

(iv) Debt to total assets ratio = $\frac{\text{Debt}}{\text{Total Assets}}$ = 38.2%.

(v) Earnings per share = $\frac{\text{Net Income}}{\text{Number of Shares}}$ = \$3.06.

(b) During 2012, 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 2012.

The company's debt to total assets ratio increased from 31.0% in 2011 to 38.2% in 2012 indicating that the company is less solvent in 2012. 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 2011 to \$3.06 in 2012. This indicates a decline in profitability during 2012.

PROBLEM 2-6A

- | | 2011 | 2012 |
|---------------------------------|---|--|
| (a) Earnings per share. | $\frac{\text{Net income}}{\text{Number of shares}} = \2.00 | $\frac{\text{Net income}}{\text{Number of shares}} = \2.12 |
| (b) Working capital. | $(\$20,000 + \$62,000 + \$73,000) - \$70,000 = \$85,000$ | $(\$28,000 + \$70,000 + \$90,000) - \$75,000 = \$113,000$ |
| (c) Current ratio. | $\frac{\$155,000}{\$70,000} = 2.2:1$ | $\frac{\text{Current assets}}{\text{Current liabilities}} = 2.5:1$ |
| (d) Debt to total assets ratio. | $\frac{\$160,000}{\$685,000} = 23.4\%$ | $\frac{\text{Debt}}{\text{Total assets}} = 20.4\%$ |
| (e) Free cash flow. | $\$56,000 - \$38,000 - \$15,000 = \$3,000$ | $\$82,000 - \$45,000 - \$20,000 = \$17,000$ |
| (f) | <p>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 total assets ratio as well as free cash flow.</p> | |

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 total 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	$\$2.86 = \frac{\text{■}}{\text{■}}$	$\$3.39 = \frac{\text{■}}{\text{■}}$

(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 total 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 Ana will follow GAAP to report its assets, liabilities, stockholders' equity, revenues, and expenses as it prepares financial statements.

- (b) **Ana 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 Ana wants to include.

PROBLEM 2-1B

KELLOGG COMPANY
Balance Sheet
December 31, 2009
(in millions)

Assets			
Current assets			
Cash and cash equivalents.....	\$	334	
Accounts receivable, net.....		1,093	
Inventories.....		910	
Other current assets.....		<u>221</u>	
Total current assets.....			\$ 2,558
Property, net.....			3,010
Other assets.....			<u>5,632</u>
Total assets.....			<u>\$11,200</u>
Liabilities and Stockholders' Equity			
Current liabilities			
Notes payable.....	\$	44	
Accounts payable.....		1,077	
Other current liabilities.....		<u>1,167</u>	
Total current liabilities.....			\$ 2,288
Long-term liabilities			
Long-term debt.....		4,835	
Other long-term liabilities.....		<u>1,802</u>	
Total long-term liabilities.....			<u>6,637</u>
Total liabilities.....			8,925
Stockholders' equity			
Common stock.....		577	
Retained earnings.....		<u>1,698</u>	
Total stockholders' equity.....			<u>2,275</u>
Total liabilities and stockholders' equity.....			<u>\$11,200</u>

PROBLEM 2-2B

TILLEY, INC.
Income Statement
For the Year Ended December 31, 2012

Revenues		
Service revenue.....		\$53,000
Expenses		
Salaries and wages expense.....	\$36,000	
Depreciation expense.....	4,300	
Maintenance and repairs expense.....	2,600	
Utilities expense.....	2,100	
Insurance expense.....	1,800	
Total expenses.....		<u>46,800</u>
Net income.....		<u>\$ 6,200</u>

TILLEY, INC.
Retained Earnings Statement
For the Year Ended December 31, 2012

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

PROBLEM 2-2B (Continued)

**TILLEY, INC.
Balance Sheet
December 31, 2012**

Assets

Current assets

Cash.....	\$ 5,100	
Accounts receivable.....	4,900	
Prepaid insurance.....	<u>1,400</u>	
Total current assets.....		\$11,400

Property, plant, and equipment

Equipment.....	31,000	
Less: Accumulated depreciation.....	<u>8,600</u>	<u>22,400</u>
Total assets.....		<u>\$33,800</u>

Liabilities and Stockholders' Equity

Current liabilities

Accounts payable.....	\$8,200	
Salaries and wages payable.....	<u>2,000</u>	
Total current liabilities.....		\$10,200

Stockholders' equity

Common stock.....	6,000	
Retained earnings.....	<u>17,600</u>	
Total stockholders' equity.....		<u>23,600</u>
Total liabilities and stockholders' equity.....		<u>\$33,800</u>

PROBLEM 2-3B

(a)

**RAPP CORPORATION
Income Statement
For the Year Ended April 30, 2012**

Revenues		
Sales revenue.....		\$21,450
Expenses		
Salaries and wages expense.....	\$6,840	
Depreciation expense.....	2,200	
Income tax expense.....	1,600	
Rent expense.....	760	
Interest expense.....	350	
Total expenses.....		<u>11,750</u>
Net income.....		<u>\$ 9,700</u>

**RAPP CORPORATION
Retained Earnings Statement
For the Year Ended April 30, 2012**

Retained earnings, May 1, 2011.....	\$13,960
Plus: Net income.....	<u>9,700</u>
	23,660
Less: Dividends.....	<u>2,800</u>
Retained earnings, April 30, 2012.....	<u>\$20,860</u>

PROBLEM 2-3B (Continued)

**(b) RAPP CORPORATION
Balance Sheet
April 30, 2012**

Assets		
Current assets		
Cash.....	\$21,955	
Accounts receivable.....	9,150	
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>
Total assets.....		<u>\$49,135</u>

Liabilities and Stockholders' Equity

Current liabilities		
Accounts payable.....	\$ 2,100	
Income taxes payable.....	300	
Interest payable.....	<u>175</u>	
Total current liabilities.....		\$ 2,575
Notes payable.....		<u>5,700</u>
Total liabilities.....		8,275
Stockholders' equity		
Common stock.....	20,000	
Retained earnings.....	<u>20,860</u>	
Total stockholders' equity.....		<u>40,860</u>
Total liabilities and stockholders' equity.....		<u>\$49,135</u>

- (c) Rapp Corporation reports its revenues and expenses on the income statement with net income being the result. Net income from the income statement is reported on the retained earnings statement as an item added to beginning retained earnings as part of the determination of retained earnings at year end. The year end retained earnings is then reported as part of stockholders' equity on the balance sheet.

PROBLEM 2-4B

- (a) Weber's net income is \$136,000 ($\$890,000 - \$620,000 - \$59,000 - \$10,000 - \$65,000$).

Its earnings per share is \$.34 ($\$136,000 \div 400,000$ shares).

Al Sharif's net income is \$44,000 ($\$450,000 - \$260,000 - \$130,000 - \$6,000 - \$10,000$).

Its earnings per share is \$.22 ($\$44,000 \div 200,000$ shares).

- (b) Weber's 2012 working capital of \$400,000 ($\$700,000 - \$300,000$) is over 3 times as high as Al Sharif's working capital of \$105,000 ($\$180,000 - \$75,000$). However, Weber's 2012 current ratio of 2.3:1 ($\$700,000 \div \$300,000$) is slightly lower than Al Sharif's current ratio of 2.4:1 ($\$180,000 \div \$75,000$).

- (c) Al Sharif appears to be less solvent. Al Sharif's 2012 debt to total assets ratio of 34% ($\$265,000 \div \$780,000$)^a is slightly higher than Weber's ratio of 33% ($\$500,000 \div \$1,500,000$)^b. The lower the percentage of debt to total assets, the lower the risk that a company may be unable to pay its debts as they come due.

Al Sharif's free cash flow is only \$22,000 ($\$46,000 - \$20,000 - \$4,000$) compared to \$115,000 ($\$180,000 - \$50,000 - \$15,000$) for Weber. More free cash flow indicates that Weber will be better able to finance more capital expenditures without taking on more debt.

^a\$265,000 ($\$75,000 + \$190,000$) is Al Sharif's 2012 total liabilities.
\$780,000 ($\$180,000 + \$600,000$) is Al Sharif's 2012 total assets.

^b\$500,000 ($\$300,000 + \$200,000$) is Weber's 2012 total liabilities.
\$1,500,000 ($\$700,000 + \$800,000$) is Weber's 2012 total assets.

PROBLEM 2-5B

(a) (i) Current ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = 2.0:1$.

(ii) Working capital = \$298,600 – \$148,700 = \$149,900.

(iii) Debt to total assets ratio = $\frac{\text{Total Debt}}{\text{Total Assets}} = 34\%$.

(iv) Free cash flow = \$71,300 – \$42,000 – \$10,000 = \$19,300.

(v) Earnings per share = $\frac{\text{Net Income}}{\text{Number of Shares}} = \1.53 .

- (b) During 2012, DeVoe's current ratio decreased from 2.4:1 to 2.0:1 and its working capital dropped from \$178,000 to \$149,900. Both measures indicate a slight decline in liquidity during 2012.

DeVoe's debt to total assets ratio increased from 31% in 2011 to 34% in 2012 indicating that the company is less solvent in 2012. Using another measure of solvency, free cash flow, we see that DeVoe's solvency has improved during 2012. Earnings per share increased from \$1.35 to \$1.53 in 2012. This 13% increase indicates better profitability in 2012.

PROBLEM 2-6B

	2011	2012
(a) Earnings per share.	$\frac{\$163,000}{320,000 \text{ shares}} = \0.51	$\frac{\$163,000}{320,000 \text{ shares}} = \0.41
(b) Working capital.	$(\$24,000 + \$55,000 + \$73,000) - \$65,000 = \$87,000$	$(\$40,000 + \$90,000 + \$74,000) - \$88,000 = \$116,000$
(c) Current ratio.	$\frac{\$24,000 + \$55,000 + \$73,000}{\$65,000} = 2.34:1$	$\frac{\$40,000 + \$90,000 + \$74,000}{\$88,000} = 2.32:1$
(d) Debt to total assets.	$\frac{\$45,000 + \$43,000}{\$24,000 + \$55,000 + \$73,000 + \$45,000 + \$43,000} = 21.8\%$	$\frac{\$85,000 + \$50,000}{\$40,000 + \$90,000 + \$74,000 + \$85,000 + \$50,000} = 22.2\%$
(e) Free cash flow.	$\$178,000 - \$45,000 - \$43,000 = \$90,000$	$\$165,000 - \$85,000 - \$50,000 = \$30,000$
(f)	The underlying profitability of the corporation as measured by earnings per share has declined. The liquidity of the corporation dropped as shown by the increase in working capital and the slight decrease current ratio. Also, the corporation appears to be increasing its debt burden as its debt to total assets increased slightly indicating a decrease in solvency. Comparing free cash flow, we find a drop in this measure of solvency also.	

PROBLEM 2-7B

Ratio	Blockbuster Inc	Movie Gallery, Inc.
	(All Dollars Are in Millions)	
(a) Working capital	\$171 (\$1,566 – \$1,395)	(\$29) (\$239 – \$268)
(b) Current ratio	1.12:1 (\$1,566 ÷ \$1,395)	.89:1 (\$239 ÷ \$268)
(c) Debt to total assets ratio	71.6% (\$2,246 ÷ \$3,137)	120.6% (\$1,390 ÷ \$1,153)
(d) Free cash flow	\$329 – \$79 – \$11 = \$239	(\$10) – \$20 – \$0 = (\$30)
(e) Earnings (Loss) per share	\$0.29 = 	(\$0.82) = 

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

Liquidity—Blockbuster's current ratio is 1.12:1 compared to Movie Gallery's .89:1. Its working capital is \$171 compared to Movie Gallery's negative \$29. Blockbuster is much more liquid than Movie Gallery using either indicator.

Solvency—Blockbuster is more solvent than Movie Gallery because its ratio of debt to total assets is significantly lower and its free cash flow is much larger.

Profitability—Blockbuster reported a net income while Movie Gallery reported a net loss. Therefore, Blockbusters is more profitable.

PROBLEM 2-8B

- (a) The primary objective of financial reporting is to provide information useful for decision making. Since Net Nanny's shares appear to be actively traded, investors must be capable of using the information made available by Net Nanny 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 Net Nanny's net income.**
- (c) The change from Canadian dollars to U.S. dollars for reporting purposes should make Net Nanny 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 total assets (total liabilities divided by total assets) and free cash flow (cash provided by operations minus dividends 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 \$211,878,000 at December 31, 2009, and \$188,588,000 at December 31, 2008.**
- (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 \$56,066,000 at December 31, 2009, and \$58,621,000 at December 31, 2008.**

(a)	(\$ in thousands)	Hershey Foods	Tootsie Roll
1. Working capital		$\$1,385,434 - \$910,628 = \$474,806$	$\$211,878 - \$56,066 = \$155,812$
2. Current ratio		$\$1,385,434 \div \$910,628 = 1.5:1$	$\$211,878 \div \$56,066 = 3.8:1$
3. Debt to total assets ratio		$\frac{\text{Debt}}{\text{Total Assets}} = 79.3\%$	$\frac{\text{Debt}}{\text{Total Assets}} = 22.2\%$
4. Free cash flow		$\$1,065,749 - \$126,324 - \$263,403 = \$676,022$	$\$75,281 - \$20,831 - \$17,825 = \$36,625$
5. Earnings per share		$\frac{\text{Net Income}}{\text{Shares Outstanding}} = \1.92	$\frac{\text{Net Income}}{\text{Shares Outstanding}} = \0.95

*\$56,066 + \$129,696

(b) **Liquidity**

Hershey Foods appears much more liquid since it has about \$319 million more working capital than Tootsie Roll. But, looking at the current ratios, we see that Tootsie Roll's ratio is more than two and a half times greater than Hershey's.

Solvency

Based on the debt to total assets ratio, Tootsie Roll is more solvent. Tootsie Roll's debt to total 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, Hershey generates much more excess cash, but both companies generate significant amounts of cash to pay debt, distribute dividends, or expand operations.

Profitability

While earnings per share cannot be used to compare profitability between companies, net income can. Hershey's net income is more than 8-times as great as Tootsie Roll.

- (a) At the time of the article, 81 of the Fortune 500 companies (the 500 largest companies in the U.S.) sponsored public blogs. Of those, 23 had links to corporate Twitter accounts.
- (b) Twitter does provide a number of potential communication advantages. It enables a company to communicate to interested parties immediately, without delay, as events occur that impact the company. It also provides an opportunity to communicate in a more friendly, less formal fashion.
- (c) Some companies are concerned about the potential legal exposure from tweets and blogs. For example, while Intel is obviously very tech-savvy, it does not use blogs or Twitter “because it fears violating SEC disclosure rules or inviting public criticism in a company-hosted forum.” Companies must normally be very careful that any communications about the company’s financial position and performance are accurate, and not in any way misleading. Because of the informal, rapid fire nature of Twitter and blogs, it is hard to maintain the same level of controls and precise language.
- (d) Lisa Wood, of Foley Hoag LLP, suggests that companies should include the same standard disclaimers they use in other communications. They must be very careful to not disclose any information in blogs or on Twitter that isn’t available elsewhere. Finally, they should make it clear that the opinions expressed by other people, such as comments that people post on blogs, are not the views of the company’s management.

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

$$\frac{\text{Decrease in total assets}}{\text{Total assets}} = 9.5\%$$

The average decrease per year can be approximated as:

$$\frac{\text{Average decrease}}{\text{Number of years}} = 2.4\% \text{ per year}$$

- (b) Gap's working capital and current ratio decreased and then increased during this period, indicating a decline and then an improvement 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 total assets ratio suggests that Gap's solvency didn't change much during the period. Debt to total assets was .38 in 2005, rose to .45 in 2007 and then came back down to .39 in 2009.
- (d) The earnings per share suggests that Gap's profitability improved significantly from 2005 to 2009, increasing from \$1.26 to \$1.59. However, based on the years shown, it appears that earnings varied a great deal during this period. An investor would want to evaluate the causes of the 25% decline in 2006 to predict the likelihood of future decreases in earnings.

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 total assets ratio is a favorable indicator for solvency and going-concern prospects. The lower the percentage of debt to total 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 total 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: T. J. Cerrillo
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 total 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:

$$\text{Earnings per share} = \frac{\text{Net income} - \text{Πρεφερρεδ στοχκ διωιδενδσ}}{\text{Απεραγε χομμον σηαρεσ ουτστανδινγ}}$$

(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.

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

DIAZ COMPANY Partial Statement of Financial Position

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

IFRS 2-5

ZURICH COMPANY Partial Statement of Financial Position December 31, 2012

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

IFRS 2-6

(a)

KARR BOWLING ALLEY Statement of Financial Position December 31, 2012

Assets			
Property, plant, and equipment			
Land.....		\$64,000	
Building.....	\$128,800		
Less: Acc. depr.—building.....	<u>42,600</u>	86,200	
Equipment.....	62,400		
Less: Acc. depr.—equipment.....	<u>18,720</u>	<u>43,680</u>	\$193,880
Current assets			
Prepaid insurance.....		4,680	
Accounts receivable.....		14,520	
Cash.....		<u>18,040</u>	<u>37,240</u>
Total assets.....			<u>\$231,120</u>
Equity and Liabilities			
Equity			
Share capital—ordinary.....	\$100,000		
Retained earnings (\$15,000 + \$3,440*).....	<u>18,440</u>		\$118,440
Non-current liabilities			
Notes payable.....			83,880
Current liabilities			
Current portion of notes payable.....	13,900		
Accounts payable.....	12,300		
Interest payable.....	<u>2,600</u>		<u>28,800</u>
Total equity and liabilities.....			<u>\$231,120</u>

*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

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

