

CHAPTER 24

Full Disclosure in Financial Reporting

ASSIGNMENT CLASSIFICATION TABLE

Topics	Questions	Brief			Cases
		Exercises	Exercises	Problems	
1. The disclosure principle; type of disclosure.	2, 3, 4, 24				1, 2, 3, 4
2. Role of notes that accompany financial statements.	1, 5, 6	1, 2			1, 2, 3, 4, 5
3. Subsequent events.	7	3	1, 2	1	5, 13
4. Segment reporting; diversified firms.	8, 9, 10, 11, 12	4, 5, 6, 7	3	2	6, 7, 8
5. Discussion and analysis.	13, 14				
6. Interim reporting.	17, 18, 19, 20				9, 10
7. Audit opinions and fraudulent reporting.	21, 22				
8. Earnings forecasts.	15, 16				11
*9. Interpretation of ratios.	23, 24, 25, 29		4, 5, 6	1	12
*10. Impact of transactions on ratios.		8	4, 5, 6	1	14
*11. Liquidity ratios.		8	4, 5, 6	1	
*12. Profitability ratios.			4, 5, 6	1	
*13. Coverage ratios.			4, 5, 6	1	
*14. Activity ratios.	26, 27	8, 9, 10	4, 5, 6	1	
*15. Comprehensive ratio problems.			4, 5, 6	3, 5	
*16. Percentage analysis.	25, 28			3, 4	

*This material is dealt with in an Appendix to the chapter.

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E24-1	Post-balance-sheet events.	Moderate	10-15
E24-2	Post-balance-sheet events.	Moderate	15-20
E24-3	Segmented reporting.	Moderate	5-10
*E24-4	Ratio computation and analysis; liquidity.	Simple	20-30
*E24-5	Analysis of given ratios.	Moderate	20-30
*E24-6	Ratio analysis.	Moderate	30-40
P24-1	Subsequent events.	Difficult	40-50
P24-2	Segmented reporting.	Moderate	24-30
*P24-3	Ratio computations and additional analysis.	Moderate	35-45
*P24-4	Horizontal and vertical analysis.	Simple	40-60
*P24-5	Dividend policy analysis.	Difficult	40-50
C24-1	General disclosures, inventories, property, plant, and equipment.	Simple	10-20
C24-2	Disclosures required in various situations.	Moderate	20-25
C24-3	Disclosures required in various situations.	Moderate	20-25
C24-4	Disclosures, conditional and contingent liabilities.	Simple	24-30
C24-5	Post-balance-sheet events.	Moderate	20-25
C24-6	Segment reporting.	Moderate	30-35
C24-7	Segment reporting—theory.	Simple	20-25
C24-8	Segment reporting—theory.	Moderate	24-30
C24-9	Interim reporting.	Simple	20-25
C24-10	Treatment of various interim reporting situations.	Moderate	30-35
C24-11	Financial forecasts.	Moderate	24-30
*C24-12	Disclosure of results—ethics.	Moderate	15-20
C24-13	Reporting of subsequent events—ethics.	Simple	10-15
*C24-14	Effect of transactions on financial statements and ratios.	Moderate	24-35

ANSWERS TO QUESTIONS

1. As indicated in the text, the major advantages are: (1) additional information pertinent to specific financial statements can be explained in qualitative terms, or supplementary data of a quantitative nature can be provided to expand on the information in the financial statements, and (2) restrictions on basic contractual agreements can be explained. The types of items normally found in footnotes are: (1) disclosure of accounting methods used, (2) disclosure of contingent assets and liabilities, (3) examination of creditor claims, (4) claims of equity holders, and (5) executory commitments.
2. The full disclosure principle in accounting calls for reporting in financial statements any financial facts significant enough to influence the judgment of an informed reader. Disclosure has increased because of the complexity of the business environment, the necessity for timely information, and the desire for more information on the enterprise for control and monitoring purposes.
3. The benefit is that an investor can determine the actual taxes paid by the enterprise. Such a determination is particularly important if the enterprise has substantial fluctuations in its effective tax rate caused by unusual or infrequent transactions. In some cases, enterprises only have income in a given period because of a favorable tax treatment that is not sustainable. Such information should be extremely useful to a financial statement reader.
4. Although the amount involved is not presently determinable, there can be no question that there exists a contingent liability which probably can be reasonably estimated. Assuming that the contingent liability can be reasonably estimated, it would be appropriate to recognize a liability on a proportionate share. Failure to accrue annually a proportionate share of the contractual obligation to recondition and restore the property at the termination of the lease would result in a misstatement of the results of operations during each of the first seven years of the lease and a much larger misstatement in the last year. Accompanying notes should be used if the account title does not clearly identify the nature and purpose of the liability and its estimated amount.
5.
 - (a) The increased likelihood that the company will suffer a costly strike requires no disclosure in the financial statements. The possibility of a strike is an inherent risk of many businesses. It, along with the risks of war, recession, etc., is in the category of general news.
 - (b) A note should provide a description of the extraordinary item in order that the financial statement user has some understanding of the nature of this item.
 - (c) Contingent assets which may materially affect a company's financial position must be disclosed when the surrounding circumstances indicate that, in all likelihood, a valid asset will materialize. In most situations, an asset would not be recognized until the court settlement had occurred.
6. Transactions between related parties are disclosed to insure that the users of the financial statements understand the basic nature of some of the transactions. Because it is often difficult to separate the economic substance from the legal form in related party transactions, disclosure is used extensively in this area. Purchase of a substantial block of the company's common stock by A. Belew, coupled with the use of an A. Belew affiliate to act as food broker, suggests that disclosure is needed.
7. "Subsequent events" are of two types:
 - (1) Those which affect the financial statements directly and should be recognized therein through appropriate adjustments.
 - (2) Those which do not affect the financial statements directly and require no adjustment of the account balances but whose effects may be significant enough to be disclosed with appropriate figures or estimates shown.
 - (a) Probably adjust the financial statements directly.
 - (b) Disclosure.
 - (c) Disclosure.

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- (d) Disclosure.
- (e) Neither adjustment nor disclosure necessary.
- (f) Neither adjustment nor disclosure necessary.
- (g) Probably adjust the financial statements directly.
- (h) Neither adjustment nor disclosure necessary.

8. Diversified companies are enterprises whose activities are segmented into unrelated industries. The accounting problems related to diversified companies are: (1) the problem of defining a segment for financial reporting purposes, (2) the difficulty of allocating common or joint costs to various segments, and (3) the problem of evaluating segment results when a great deal of transfer pricing is involved.
9. After the company decides on the segments for possible disclosure, a quantitative test is made to determine whether the segment is significant enough to warrant actual disclosure. An industry segment is identified as a reportable segment if it satisfies **one or more** of the following tests.
- (a) Its **revenue** (including both sales to unaffiliated customers and intersegment sales or transfers) is 10% or more of the combined revenue (sales to unaffiliated customers and intersegment sales or transfers) of all the enterprise's industry segments.
 - (b) The absolute amount of its **operating profit or operating loss** is 10% or more of the greater, in absolute amount, of
 - (1) the combined operating profit of all industry segments that did not incur an operating loss, or
 - (2) the combined operating loss of all industry segments that did incur an operating loss.
 - (c) Its **identifiable assets** are 10% or more of the combined identifiable assets of all industry segments.

In applying these tests, two additional factors must be considered. First, segment data must explain a significant portion of the company's business. Specifically, the segmented results must equal or exceed 75% of the combined sales to unaffiliated customers for the entire enterprise. This test prevents a company from providing limited information on only a few segments and lumping all the rest into one category.

Second, the profession recognized that reporting too many segments may overwhelm users with detailed information. Although the FASB did not issue any specific guidelines regarding how many segments are too many, this point is generally considered reached when a company has 10 or more reportable segments.

10. FASB Statement No. 131 requires that a company report:
- (a) General information about its operating segments.
 - (b) Segment profit and loss and related information.
 - (c) Segment assets.
 - (d) Reconciliations (reconciliations of total revenues, income before income taxes, and total assets).
 - (e) Information about products and services and geographic areas.
 - (f) Major customers.
11. An operating segment is a component of an enterprise:
- (a) That engages in business activities from which it earns revenues and incurs expenses.
 - (b) Whose operating results are regularly reviewed by the company's chief operating decision maker to assess segment performance and allocate resources to the segment.
 - (c) For which discrete financial information is available that is generated by or based on the internal financial reporting system.

Information about two operating segments can be aggregated only if the segments have the same basic characteristics related to the: (1) nature of the products provided, (2) nature of the production process, (3) type or class of customer, (4) methods of product or service distribution, and (5) nature of the regulatory environment.

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12. One of the major reasons for not providing segment information is that competitors will then be able to determine the profitable segments and enter that product line themselves. If this occurs and the other company is successful, then the present stockholders of Chang Lee Inc. may suffer. This question should illustrate to the student that the answers are not always black and white. Disclosure of segments undoubtedly provides some needed information, but some disclosures are confidential.
13. The management discussion and analysis section covers three financial aspects of an enterprise's business—liquidity, capital resources, and results of operations. It requires management to highlight favorable or unfavorable trends and to identify significant events and uncertainties that affect these three factors.
14. Management has the primary responsibility for the preparation, integrity, and objectivity of the company's financial statements. If management wishes to present information in a certain way, it may do so. If the auditor objects because GAAP is violated, some type of audit exception is called for.
15. Arguments against providing earnings projections:
 - (a) No one can foretell the future. Therefore forecasts, while conveying an impression of precision about the future, will nevertheless inevitably be wrong.
 - (b) Organizations will not strive to produce results which are in the stockholders' best interest, but merely to meet their published forecasts.
 - (c) When forecasts are not met, there will be recriminations and probably legal actions.
 - (d) Disclosure of forecasts will be detrimental to organizations because it will fully inform not only investors but competitors (foreign and domestic).
16. Arguments for providing earnings forecasts are:
 - (a) Investment decisions are based on future expectations; therefore, information about the future facilitates better decisions.
 - (b) Forecasts are already circulated informally, but are uncontrolled, frequently misleading, and not available equally to all investors. This confused situation should be brought under control.
 - (c) Circumstances now change so rapidly that historical information is no longer adequate for prediction.
17. Interim reports are unaudited financial statements normally prepared four times a year. Balance sheets are often not provided because this information is not deemed crucial over a short period of time; the income figure has much more relevance to interim reporting.
18. The accounting problems related to the presentation of interim data are as follows:
 - (a) The proper handling of extraordinary items.
 - (b) The difficulty of allocating costs, such as income taxes, pensions, etc., to the proper quarter.
 - (c) The problem of LIFO inventory valuation.
 - (d) Presentation of EPS figures.
 - (e) Problems of fixed cost allocation.
19. The problem when a LIFO base is used for quarterly reporting is that the LIFO base might be reduced in a given quarter, but for the year, this base is not reduced. If the inventory base will be replaced before the year ends, then a purchase reserve (equalization account) should be set up to reflect a higher cost of sales and to achieve a more realistic interim statement for net income.
20. One suggestion has been to normalize the fixed nonmanufacturing costs on the basis of predicted sales. The problem with this method is that future sales are unknown and hence a great deal of subjectivity is involved. Another approach is to charge as a period charge those costs that are impossible to allocate to any one period. Under this approach, reported results for a quarter would only indicate the contribution toward fixed costs and profits, which is essentially a contribution margin approach.

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21. The CPA expresses a “clean” or unqualified opinion when the client’s financial statements present fairly the client’s financial position and results of operations on the basis of an examination made in accordance with generally accepted auditing standards, and the statements are in conformity with generally accepted accounting principles and include all informative disclosures necessary to make the statements not misleading. The CPA expresses a qualified opinion when he/she must take exception to the presentation of one or more components of the financial statements but the exception or exceptions are not serious enough to negate his/her expression of an opinion or to express an “adverse” opinion.
22. Fraudulent financial reporting is intentional or reckless conduct, whether act or omission, that results in materially misleading financial statements. Fraudulent financial reporting can involve many factors and take many forms. It may entail gross and deliberate distortion of corporate records, such as inventory count tags, or falsified transactions, such as fictitious sales or orders. It may entail the misapplication of accounting principles. Company employees at any level may be involved, from top to middle management to lower-level personnel. If the conduct is intentional, or so reckless that it is the legal equivalent of intentional conduct, and results in fraudulent financial statements, it comes within the operating definition of the term **fraudulent financial reporting**.

Fraudulent financial reporting differs from other causes of materially misleading financial statements, such as unintentional errors. Fraudulent reporting is distinguished from other corporate improprieties, such as employee embezzlements, violations of environmental or product safety regulations, and tax fraud, which do not necessarily cause financial statements to be materially inaccurate.

Fraudulent financial reporting usually occurs as the result of certain environmental, institutional, or individual forces and opportunities. These forces and opportunities add pressures and incentives that encourage individuals and companies to engage in fraudulent financial reporting and are present to some degree in all companies. If the right combustible mixture of forces and opportunities is present, fraudulent financial reporting may occur.

A frequent incentive for fraudulent financial reporting that improves the company’s financial appearance is the desire to obtain a higher price from a stock or debt offering or to meet the expectations of investors. Another incentive may be the desire to postpone dealing with financial difficulties and thus avoid, for example, violating a restrictive debt covenant. Other times the incentive is personal gain: additional compensation, promotion, or escape from penalty for poor performance.

Situational pressures on the company or an individual manager also may lead to fraudulent financial reporting. Examples of these situational pressures include:

Sudden decreases in revenue or market share. A single company or an entire industry can experience these decreases.

Unrealistic budget pressures, particularly for short-term results. These pressures may occur when headquarters arbitrarily determines profit objectives and budgets without taking actual conditions into account.

Financial pressure resulting from bonus plans that depend on short-term economic performance. This pressure is particularly acute when the bonus is a significant component of the individual’s total compensation.

Opportunities for fraudulent financial reporting are present when the fraud is easier to commit and when detection is less likely. Frequently these opportunities arise from:

The absence of a board of directors or audit committee that vigilantly oversees the financial reporting process.

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Weak or nonexistent internal accounting controls. This situation can occur, for example, when a company's revenue system is overloaded from a rapid expansion of sales, an acquisition of a new division, or the entry into a new, unfamiliar line of business.

Unusual or complex transactions. Examples include the consolidation of two companies, the divestiture or closing of a specific operation, and agreements to buy or sell government securities under a repurchase agreement.

Accounting estimates requiring significant subjective judgment by company management. Examples include reserves for loan losses and the yearly provision for warranty expense.

- *23. It has been said that "everything is relative," and this is certainly true of financial statement data. The chief significance of financial statement data is not so much in the absolute amounts presented but in their relative significance; that is, in the conclusions reached after comparing each item with similar items and after association with related data. Financial statements present measures of quantity (this is not to exclude the qualitative aspects of things that dollar quantities reflect), but whether any amount is adequate or not in view of the company's needs, or whether it represents an amount out of proportion to the company's other amounts, or whether it represents an improvement over previous years that cannot be determined from the absolute amount alone.
- *24. Your friend should be advised that in order to interpret adequately and to evaluate financial statement data, an individual must:
- (a) Understand the nature and limitations of accounting.
 - (b) Understand the terminology of accounting and business.
 - (c) Have some knowledge of business.
 - (d) Be acquainted with the nature and tools of financial statement analysis.
- *25. Percentage analysis consists of reducing a series of related amounts to a series of percentages of a given base while ratio analysis is the computation of any specific ratio of one figure to another within the reported data.

Percentage analysis facilitates comparison and is helpful in evaluating the relative size of a series of items. Ratio analysis points out the existence of a specific relationship and then proceeds to measure the relationship in terms of either a percentage figure or a single proportion.

- *26. Cost of goods sold is used for two reasons: first, cost must be used rather than retail value because the average inventory figures are on a cost basis. Second, since measurement of the turnover involves determination of the number of times inventory was sold this period in comparison to the total cost incurred, cost of goods sold must be used as representative of total cost incurred. An increasing inventory turnover may be an indication of stockouts or inventory shortages.
- *27. The relation of asset turnover to rate of return on assets is as follows:

$$\frac{\text{Sales}}{\text{Average Total Assets}} \times \frac{\text{Net Income}}{\text{Sales}} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

An increase in the asset turnover, holding profit margin constant, results in an increase in rate of return and vice versa.

- *28. (a) **Common-size analysis** is reduction of all dollar amounts in the financial statements to a percentage of a base amount.
- (b) **Vertical analysis** is the expression percentage-wise of each item on a financial statement in a given period to a base figure.
- (c) **Horizontal analysis** is the computation of the percentage change over time.

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(d) **Percentage analysis** consists of reducing a series of related amounts to a series of percentages of a given base. This type of analysis facilitates comparisons and is helpful in evaluating the relative size of items such as expenses, current assets, or net income.

*29. Some believe that the FASB should not be involved in developing standards related to the presentation of ratios. A basic concern expressed by this group is: how far should the FASB go? That is, where does financial reporting end and financial analysis begin? Furthermore, we know so little concerning which ratios are used and in what combinations that attempting to require disclosure of certain ratios in this area would not be helpful. One reason for the profession's reluctance to mandate disclosures is that research regarding the use and usefulness of summary indicators is still limited.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 24-1

The reader should recognize that the firm has an obligation for lease payments of approximately \$5,711,000 for the next three years. In certain situations, this information is very important in determining: (1) the ability of the firm to use additional lease financing, and (2) the nature of maturing commitments and the amount of cash expenditures involved. Off-balance-sheet financing is common and the investor should be cognizant that the company has a commitment even though it is not reflected in the liability section of the balance sheet. The rental income from the subleases also provides useful information concerning the company's ability to generate revenues in the near future.

BRIEF EXERCISE 24-2

The reader should recognize that there are dilutive securities outstanding but the net effect on earnings per share will be negligible. In addition, the purchase of treasury stock enabled the company to increase its earnings per share. The important point concerning this note is that no significant dilution of present stockholders' interests will occur if conversion occurs.

BRIEF EXERCISE 24-3

Net income will decrease by \$20,000 as a result of the adjustment of the liability. The settlement of the liability is the type of subsequent event which provides additional evidence about conditions that existed at the balance sheet date. The flood loss (\$80,000) is an event that provides evidence about conditions that did not exist at the balance sheet date but are subsequent to that date and does not require adjustment of the financial statements.

BRIEF EXERCISE 24-4

It should be emphasized that because a company discloses its segmental results, this does not relieve the necessity for providing consolidated results as well. Sometimes individuals become confused because they believe that employment of segmental reporting means that consolidated statements should not be presented. There appears to be a need to provide both types of information. The consolidated results provide information on overall financial position and profitability, while the segmental results provide information on the specific details which comprise the overall results.

BRIEF EXERCISE 24-5

$$\text{\$600} + \text{\$650} + \text{\$250} + \text{\$375} + \text{\$225} + \text{\$200} + \text{\$700} = \text{\$3,000}.$$

$$\text{\$3,000} \times 10\% = \text{\$300}.$$

Genso, Konami, Red Moon, and Nippon meet this test.

BRIEF EXERCISE 24-6

$$\text{\$90} + \text{\$25} + \text{\$50} + \text{\$34} + \text{\$100} = \text{\$299}.$$

$$\text{\$299} \times 10\% = \text{\$29.9}.$$

Genso, Konami, Red Moon, Takuhi, and Nippon meet this test.

BRIEF EXERCISE 24-7

$$\text{\$500} + \text{\$550} + \text{\$400} + \text{\$400} + \text{\$200} + \text{\$150} + \text{\$475} = \text{\$2,675}.$$

$$\text{\$2,675} \times 10\% = \text{\$267.5}.$$

Genso, Konami, RPG, Red Moon, and Nippon meet this test.

***BRIEF EXERCISE 24-8**

(a) $X + \text{\$600,000} = 5X$

$$\text{\$600,000} = 4X$$

$$\text{\$150,000} = \text{Current liabilities}$$

(b) $\text{Cost of goods sold last year} = \text{\$200,000} \times 5 = \text{\$1,000,000}$

$$\text{\$1,000,000} \div 8 = \text{\$125,000} = \text{Average inventory in current year}$$

(c) $\text{\$90,000} \div \text{\$30,000} = \text{Current ratio of 3:1}$

$$\text{\$50,000} \div \text{\$30,000} = \text{Acid-test ratio of 1.67:1}$$

$$\text{\$105,000} \div \text{\$45,000} = \text{Current ratio of 2.33:1}$$

$$\text{\$65,000} \div \text{\$45,000} = \text{Acid-test ratio of 1.44:1}$$

(d) $\text{\$600,000} \div \text{\$420,000} = 1.43:1$ after declaration, but before payment

$$\text{After payment, } \text{\$420,000} \div \text{\$240,000} = 1.75:1$$

***BRIEF EXERCISE 24-9**

$$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}} = \text{Inventory Turnover}$$

$$\frac{\$90,000,000}{\text{Average Inventory}} = 9$$

Average inventory (current) therefore equals \$10,000,000 (\$90,000,000 ÷ 9).

$$\frac{\$90,000,000}{\text{Average Inventory}} = 12$$

Average inventory (new) equals \$7,500,000 (\$90,000,000 ÷ 12).

\$2,500,000 X 10% = \$250,000 cash savings.

***BRIEF EXERCISE 24-10**

$$\frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}} = \text{Accounts Receivable Turnover}$$

$$\frac{\text{Net Credit Sales}}{\$1,100,000} = 5$$

Net Credit Sales = \$5,500,000 (\$1,100,000 x 5).

Total Net Sales = \$5,500,000 + \$400,000 = \$5,900,000

Note: Net credit sales is usually not known; then use total net sales to calculate the accounts receivable turnover.

SOLUTIONS TO EXERCISES

EXERCISE 24-1 (10-15 minutes)

- (a) The issuance of common stock is an example of a subsequent event which provides evidence about conditions that did not exist at the balance sheet date but arose subsequent to that date. Therefore, no adjustment to the financial statements is recorded. However, this event should be disclosed either in a note, a supplemental schedule, or even pro-forma financial data.
- (b) The changed estimate of taxes payable is an example of a subsequent event which provides additional evidence about conditions that existed at the balance sheet date. The income tax liability existed at December 31, 2005, but the amount was not certain. This event affects the estimate previously made and should result in an adjustment of the financial statements. The correct amount (\$1,270,000) would have been recorded at December 31 if it had been available. Therefore, Madrasah should increase income tax expense in the 2005 income statement by \$170,000. In the balance sheet, income taxes payable should be increased and retained earnings decreased by \$170,000.

EXERCISE 24-2 (15-20 minutes)

- | | | | | | | | |
|----|-----|----|-----|----|-----|-----|-----|
| 1. | (a) | 4. | (b) | 7. | (c) | 10. | (c) |
| 2. | (c) | 5. | (c) | 8. | (b) | 11. | (a) |
| 3. | (b) | 6. | (c) | 9. | (a) | 12. | (b) |

EXERCISE 24-3 (5-10 minutes)

- (a) Revenue test: $10\% \times \$102,000 = \$10,200$.
Segments W (\$60,000) and Y (\$23,000) both meet this test.
- (b) Operating profit test: $10\% \times (\$15,000 + \$3,000 + \$1,000) = \$1,900$.
Segments W (\$15,000), X (\$3,000), and Y (\$2,000 absolute amount) all meet this test.
- (c) Identifiable assets test: $10\% \times \$290,000 = \$29,000$.
Segments W (\$67,000) and X (\$83,000) both meet this test.

***EXERCISE 24-4 (20-30 minutes)**

Computations are given below which furnish some basis of comparison of the two companies:

	Toulouse Co.	Lautrec Co.
Composition of current assets		
Cash	13%	28%
Receivables	24%	27%
Inventories	<u>63%</u>	<u>45%</u>
	<u>100%</u>	<u>100%</u>
Computation of various ratios		
Current ratio ($\$910 \div \305)	2.98 to 1 ($\$1,140 \div \350)	3.26 to 1
Acid-test ratio ($\$120 + \$220) \div \$305$	1.11 to 1 ($\$320 + \$302) \div \$350$	1.78 to 1
Accounts receivable turnover $\$930 \div \220	4.23 times $\$1,500 \div \302	4.97 times
Inventory turnover	1.14 ^a times	1.74 ^b times
Cash to current liabilities ($\$120 \div \305)	.39 to 1 ($\$320 \div \350)	.91 to 1

^a $(\$930 \times .70) \div \570 ^b $(\$1,500 \times .60) \div \518

Lautrec Co. appears to be a better short-term credit risk than Toulouse Co. Analysis of various liquidity ratios demonstrates that Lautrec Co. is stronger financially, all other factors being equal, in the short-term. Comparative risk could be judged better if additional information were available relating to such items as net income, purpose of the loan, due date of current and long-term liabilities, future prospects, etc.

***EXERCISE 24-5 (20-30 minutes)**

- (a) The acid-test ratio is the current ratio with the subtraction of inventory and prepaid expenses (generally insignificant relative to inventory) from current assets. Any divergence in trend between these two ratios would therefore be dependent upon the inventory account. Inventory turnover has declined sharply in the three-year period, from 4.91 to 3.42. During the same period, sales to fixed assets have increased and total sales have increased 7 percent. The decline in the inventory turnover is therefore not due to a decline in sales. The apparent cause is that investment in inventory has increased at a faster rate than sales, and this has accounted for the divergence between the acid-test and current ratios.

***EXERCISE 24-5 (Continued)**

- (b) Financial leverage has definitely declined during the three-year period. This is shown by the steady drop in the long-term debt-to-total-assets ratio, and the total-debt-to-total-assets ratio. Apparently the decline of debt as a percentage of this firm's capital structure is accounted for by a reduction in the long-term portion of the firm's indebtedness. This reduction of leverage accounts for the decrease in the return on stockholders' equity ratio. This conclusion is reinforced by the fact that net income to sales and return on total assets have both increased.
- (c) The company's net investment in plant and equipment has decreased during the three-year period 2003-2005. This conclusion is reached by using the sales-to-fixed-assets (fixed asset turnover) and sales-as-a-percent-of-2003-sales ratios.

Because sales have grown each year, the sales-to-fixed-assets could be expected to increase unless fixed assets grew at a faster rate. The sales-to-fixed-assets ratio increased at a faster rate than the 3 percent annual growth in sales; therefore, net investment in plant and equipment must have declined.

***EXERCISE 24-6 (30-40 minutes)**

- (a) The current ratio measures overall short-term liquidity and is an indicator of the short-term debt-paying ability of the firm.

The quick ratio also is a measure of short-term liquidity. However, it is a measure of more immediate liquidity than the current ratio and is an indicator of a firm's ability to pay all of its immediate debts from cash or near-cash assets. The quick ratio is also an indicator of the degree of inventories in its current assets when compared to the current ratio.

Inventory turnover is an indicator of the number of times a firm sells its average inventory level during the year. A low inventory turnover may indicate excessive inventory accumulation or obsolete inventory.

Net sales to stockholders' equity is an activity ratio that measures the number of times the stockholders' equity was turned over in sales volume. This ratio could also be referred to as a net asset turnover ratio that measures net asset management. Thus, it is a measure of operational efficiency.

***EXERCISE 24-6 (Continued)**

Net income to stockholders' equity is a profitability ratio. It measures the return on stockholders' investment and is used to evaluate the company's success in generating income for the benefit of its stockholders (i.e., management effectiveness).

Total liabilities to stockholders' equity compares the amount of resources provided by creditors to the resources provided by stockholders. Thus, it measures the extent of leverage in the company's financial structure and is used to evaluate or judge the degree of financial risk.

- (b) The two ratios that each of the four entities would specifically use to examine Edna Millay Inc. are as follows:**

Archibald MacLeish Bank would employ the current or quick ratio and the total liabilities to equity ratio.

Robert Lowell Company would employ either the current or quick ratios in conjunction with either the inventory turnover or total liabilities to equity ratio.

Robert Penn Warren would employ net sales to net worth and net income to equity.

The Working Capital Management Committee would review the current or quick ratio and the inventory turnover ratio.

- (c) Edna Millay Inc. appears to have a strong current/liquidity position as evidenced by the current and quick ratios that have been improving over the three-year period. In addition, the current ratio is greater than the industry average and the quick ratio is just slightly below. However, the increase in the current ratio could be due to an increase in inventory levels. This fact is confirmed by the deteriorating inventory turnover ratio that is also below the industry average. Overstock or obsolete inventory conditions may exist.**

Edna Millay's profitability is good as indicated by the profitability ratios that have been increasing. Both profitability ratios are greater than the industry average. The net profit margin (net income to net sales) can be derived from these two ratios (net income to equity and net sales to equity), and Millay's margin has increased each year (2002: 5.17%; 2003: 5.36%; 2004: 5.69%) and exceeds the industry average (3.86%).

***EXERCISE 24-6 (Continued)**

The total liabilities to equity ratio has increased over the three-year period and exceeds the industry average, indicating a heavy reliance on debt. This high leverage position could be dangerous if sales volume, sales margin, or income falls because interest expense is a fixed cash outlay.

TIME AND PURPOSE OF PROBLEMS

Problem 24-1 (Time 40-50 minutes)

Purpose—to provide the student with various post-balance-sheet or subsequent events to evaluate and to prepare the proper disclosures for each item, if necessary.

Problem 24-2 (Time 24-30 minutes)

Purpose—to provide the student with an understanding of rules for segment reporting. The student must determine which of five segments are subject to segment reporting rules and describe the required disclosures.

***Problem 24-3** (Time 35-45 minutes)

Purpose—to provide the student with an understanding of certain key ratios. In addition, the student is asked to identify and explain what other financial reports or financial analysis might be employed. Also, the student is to determine whether the company can finance the plant expansion internally and whether an extension on the note should be made.

***Problem 24-4** (Time 40-60 minutes)

Purpose—to provide the student with an understanding of the conceptual merits in the presentation of financial statements by both horizontal analysis and vertical analysis. The student is required to prepare a comparative balance sheet for the given financial information under each of the two approaches. The student is then asked to discuss the merits of each of the presentations.

***Problem 24-5** (Time 40-50 minutes)

Purpose—to provide the student a situation in which ratio analysis is used in a decision concerning payment of dividends.

SOLUTIONS TO PROBLEMS

PROBLEM 24-1

SABRINA CORPORATION Balance Sheet As of December 31, 2005

<u>Assets</u>			
<u>Current assets</u>			
Cash (\$571,000 – \$400,000)		\$ 171,000	
Accounts receivable (\$480,000 + \$30,000)	\$ 510,000		
Less allowance for doubtful accounts	<u>30,000</u>	480,000	
Notes receivable		162,300	
Inventories (LIFO)		645,100	
Prepaid expenses		<u>47,400</u>	
Total current assets			\$1,505,800
<u>Long-term investments</u>			
Investments in land		185,000	
Cash surrender value of life insurance		84,000	
Cash restricted for plant expansion		<u>400,000</u>	669,000
<u>Property, plant, and equipment</u>			
Plant and equipment (pledged as collateral for bonds) (\$4,130,000 + \$1,430,000)	5,560,000		
Less accumulated depreciation	<u>1,430,000</u>	4,130,000	
Land		<u>446,200</u>	4,576,200
<u>Intangible assets</u>			
Goodwill, at cost			<u>252,000</u>
Total assets			<u>\$7,003,000</u>

PROBLEM 24-1 (Continued)

Liabilities and Stockholders' Equity

Current liabilities

Accounts payable	\$ 510,000	
Estimated income taxes payable	145,000	
Dividends payable	200,000	
Accrued wages payable	275,000	
Unearned revenue	489,500	
Accrued interest payable (\$750,000 X 8% X 8/12)	40,000	
Total current liabilities		\$1,659,500

Long-term liabilities

Notes payable (due 2007)	157,400	
8% bonds payable (secured by plant and equipment)	\$ 750,000	
Less unamortized bond discount*	42,900	707,100
Total liabilities		864,500
		2,524,000

Stockholders' equity

Capital stock, par value \$10 per share; authorized 200,000 shares; 184,000 shares issued and outstanding	1,840,000	
Paid-in capital in excess of par	150,000	1,990,000
Retained earnings		2,489,000**
Total stockholders' equity		4,479,000
Total liabilities and stockholders' equity		\$7,003,000

*(\$49,500 ÷ 5 = \$9,900; \$9,900 X 8/12 = \$6,600; \$49,500 – \$6,600 = \$42,900)

**Retained earnings	\$2,810,600	
Accrued wages omitted	(275,000)	
Accrued interest	(40,000)	
Bond amortization	(6,600)	
	\$2,489,000	

PROBLEM 24-1 (Continued)

Additional comments:

- 1. The information related to the competitor should be disclosed because this innovation may have a significant effect on the company. The value of the inventory is overstated because of the need to reduce selling prices. This factor along with the net realizable value of the inventory should be disclosed.**
- 2. The pledged assets should be described in the balance sheet as indicated or in a footnote.**
- 3. The error in calculating inventory will have been offset, so no adjustment is needed.**
- 4. Accrued wages is included as a liability and retained earnings is reduced.**
- 5. The fact that the gain on sale of certain plant assets was credited directly to retained earnings has no effect on the balance sheet presentation.**
- 6. Technically, the plant and equipment account should be separately disclosed and depreciation computed on each item individually. However, the information to divide the accounts was not given in this problem.**
- 7. Accrued interest on the bonds ($\$750,000 \times 8\% \times 8/12 = \$40,000$) was never recorded. This amount will also reduce retained earnings. The related discount amortization [$(\$49,500 \div 60) \times 8 \text{ months} = \$6,600$] will reduce both the discount account and retained earnings.**

PROBLEM 24-2

(a) Determination of reportable segments:

- (1) Revenue test: $10\% \times \$790,000^* = \$79,000$. Segments B (\$80,000) and C (\$580,000) both meet this test.

$$*\$40,000 + \$80,000 + \$580,000 + \$35,000 + \$55,000$$

- (2) Operating profit test: $10\% \times (\$11,000 + \$75,000 + \$4,000 + \$7,000) = \$9,700$. Segments A (\$11,000), B (\$10,000 absolute value), and C (\$75,000) all meet this test.

- (3) Identifiable assets test: $10\% \times \$710,000^{**} = \$71,000$. Only segment C (\$500,000) meets this test.

$$**\$35,000 + \$60,000 + \$500,000 + \$65,000 + \$50,000$$

(b) Disclosures required by FASB No. 131:

	A	B	C	Other	Totals
External Revenues	\$40,000	\$ 60,000	\$480,000	\$ 90,000	\$670,000
Intersegment Revenues		<u>\$ 20,000</u>	<u>\$100,000</u>		<u>\$120,000</u>
Total Revenues	<u>\$40,000</u>	<u>\$ 80,000</u>	<u>\$580,000</u>	<u>\$ 90,000</u>	<u>\$790,000</u>
Cost of Goods Sold	\$19,000	\$ 50,000	\$270,000	\$ 49,000	
Operating Expenses	<u>\$10,000</u>	<u>\$ 40,000</u>	<u>\$235,000</u>	<u>\$ 30,000</u>	
Total Expenses	<u>\$29,000</u>	<u>\$ 90,000</u>	<u>\$505,000</u>	<u>\$ 79,000</u>	
Operating Profit (Loss)	<u>\$11,000</u>	<u>\$(10,000)</u>	<u>\$ 75,000</u>	<u>\$ 11,000</u>	<u>\$ 87,000</u>
Identifiable Assets	<u>\$35,000</u>	<u>\$ 60,000</u>	<u>\$500,000</u>	<u>\$115,000</u>	<u>\$710,000</u>

Reconciliation of revenues

Total segment revenues	\$790,000
Revenues of immaterial segments	(90,000)
Elimination of intersegment revenues	<u>(120,000)</u>
Revenues from reportable segments	<u>\$580,000</u>

Reconciliation of profit or loss

Total segment operating profit	\$ 87,000
Profits of immaterial segments	<u>(11,000)</u>
Profits from reportable segments	<u>\$ 76,000</u>

PROBLEM 24-2 (Continued)

Reconciliation of assets

Total segment assets	\$710,000
Assets of immaterial segments	<u>(115,000)</u>
Assets from reportable segments	<u>\$595,000</u>

***PROBLEM 24-3**

(a)

**Carl Sandburg Corporation
Financial Statistics**

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

2003: $\frac{\$320,000}{\$158,500} = 2.02 \text{ to } 1$ 2004: $\frac{\$393,000}{\$154,000} = 2.55 \text{ to } 1$

2. **Quick ratio = $\frac{\text{Current assets} - \text{Inventories}}{\text{Current liabilities}}$**

2003: $\frac{\$270,000}{\$158,500} = 1.70 \text{ to } 1$ 2004: $\frac{\$298,000}{\$154,000} = 1.94 \text{ to } 1$

3. **Inventory turnover = $\frac{\text{Cost of goods sold}}{\text{Average inventory}}$**

2004: $\frac{\$1,530,000}{\frac{\$50,000 + \$95,000}{2}} = 21.1 \text{ times (every 17.3 days)}$

4. **Return on assets = $\frac{\text{Net income}}{\text{Average total assets}}$**

2003: $\frac{\$297,000}{\frac{\$1,688,500 + \$1,740,500}{2}} = 17.3\%$

2004: $\frac{\$366,000}{\frac{\$1,740,500 + \$1,842,000}{2}} = 20.4\%$

***PROBLEM 24-3 (Continued)**

5. <u>Percent Changes</u>	<u>Amounts</u>		<u>Percent Increase</u>
	2004	2003	
			(000s omitted)
Sales	\$3,000	\$2,700	$\frac{\$300}{\$2,700} = 11.11\%$
Cost of goods sold	1,530	1,425	$\frac{\$105}{\$1,425} = 7.37\%$
Gross margin	1,470	1,275	$\frac{\$195}{\$1,275} = 15.29\%$
Net income after taxes	366	297	$\frac{\$69}{\$297} = 23.23\%$

(b) Other financial reports and financial analyses which might be helpful to the commercial loan officer of Spokane National Bank include:

1. The Statement of Cash Flows would highlight the amount of cash provided by operating activities, the other sources of cash, and the uses of cash for the acquisition of long-term assets and long-term debt requirement.
2. Projected financial statements for 2005 including a projected Statement of Cash Flows. In addition, a review of Sandburg's comprehensive budgets might be useful. These items would present management's estimates of operations for the coming year.
3. A closer examination of Sandburg's liquidity by calculating some additional ratios, such as day's sales in receivables, accounts receivable turnover, and day's sales in inventory.
4. An examination as to the extent that leverage is being used by Sandburg.

(c) Sandburg Corporation should be able to finance the plant expansion from internally generated funds as shown in the calculations presented on the next page.

***PROBLEM 24-3 (Continued)**

(000 omitted)

	2004	2005	2006
Sales	\$3,000.0	\$3,333.3	\$3,703.6
Cost of goods sold	<u>1,530.0</u>	<u>1,642.8</u>	<u>1,763.8</u>
Gross margin	1,470.0	1,690.5	1,939.8
Operating expenses	<u>860.0</u>	<u>948.2</u>	<u>1,045.5</u>
Income before taxes	610.0	742.3	894.3
Income taxes (40%)	<u>244.0</u>	<u>296.9</u>	<u>357.7</u>
Net income	<u>\$ 366.0</u>	<u>\$ 445.4</u>	<u>\$ 536.6</u>
Add: Depreciation		102.5	102.5
Deduct: Dividends		(260.0)	(260.0)
Note repayment		<u>(6.0)</u>	<u> </u>
Funds available for plant expansion		281.9	379.1
Plant expansion		<u>(150.0)</u>	<u>(150.0)</u>
Excess funds		<u>\$ 131.9</u>	<u>\$ 229.1</u>

Assumptions:

Sales increase at a rate of 11.11%.
 Cost of goods sold increases at rate of 7.37%, despite depreciation remaining constant.
 Other operating expenses increase at the same rate experienced from 2003 to 2004; i.e., at 10.26% (\$80,000 ÷ \$780,000).

Depreciation remains constant at \$102,500.
 Dividends remain at \$2.00 per share.
 Plant expansion is financed equally over the two years (\$150,000 each year).
 Loan extension is granted.

- (d) Spokane National Bank should probably grant the extension of the loan, if it is really required, because the projected cash flows for 2005 and 2006 indicate that an adequate amount of cash will be generated from operations to finance the plant expansion and repay the loan. In actuality, there is some question whether Sandburg needs the extension because the excess funds generated from 2005 operations might cover the \$70,000 loan repayment. However, Sandburg may want the loan extension to provide a cushion because its cash balance is low. The financial ratios indicate that Sandburg has a solid financial structure. If the bank wanted some extra protection, it could require Sandburg to appropriate retained earnings for the amount of the loan and/or restrict cash dividends for the next two years to the 2004 amount of \$2.00 per share.

***PROBLEM 24-4**

(a) **EOLA YEVETTE COMPANY**
Comparative Balance Sheet
December 31, 2004 and 2003

Assets	December 31			
	2004		2003	
Cash	\$ 180,000	5.39%	\$ 275,000	9.87%
Accounts receivable (net)	220,000	6.59	155,000	5.57
Short-term Investments	270,000	8.08	150,000	5.39
Inventories	960,000	28.74	980,000	35.18
Prepaid expenses	25,000	.75	25,000	.90
Fixed assets	2,685,000	80.39	1,950,000	70.02
Accumulated depreciation	<u>(1,000,000)</u>	<u>(29.94)</u>	<u>(750,000)</u>	<u>(26.93)</u>
Total	<u>\$3,340,000</u>	<u>100.00%</u>	<u>\$2,785,000</u>	<u>100.00%</u>
Liabilities and Stockholders' Equity				
Accounts payable	\$ 50,000	1.50%	\$ 75,000	2.69%
Accrued expenses	170,000	5.09	200,000	7.18
Bonds payable	500,000	14.97	190,000	6.82
Capital stock	2,100,000	62.87	1,770,000	63.56
Retained earnings	<u>520,000</u>	<u>15.57</u>	<u>550,000</u>	<u>19.75</u>
Total	<u>\$3,340,000</u>	<u>100.00%</u>	<u>\$2,785,000</u>	<u>100.00%</u>

***PROBLEM 24-4 (Continued)**

(b)

**EOLA YEVETTE COMPANY
Comparative Balance Sheet
December 31, 2004 and 2003**

Assets	December 31		Increase or (Decrease)	
	2004	2003	\$ Change	% Change
Cash	\$ 180,000	\$ 275,000	\$ (95,000)	(34.55)
Accounts receivable (net)	220,000	155,000	65,000	41.94
Investments	270,000	150,000	120,000	80.00
Inventories	960,000	980,000	(20,000)	(2.04)
Prepaid expenses	25,000	25,000	0	0
Fixed assets	2,685,000	1,950,000	735,000	37.69
Accumulated depreciation	<u>(1,000,000)</u>	<u>(750,000)</u>	<u>(250,000)</u>	33.33
Total	<u>\$ 3,340,000</u>	<u>\$2,785,000</u>	<u>\$ 555,000</u>	19.93%
Equities				
Accounts payable	\$ 50,000	\$ 75,000	\$ (25,000)	(33.33)
Accrued expenses	170,000	200,000	(30,000)	(15.00)
Bonds payable	500,000	190,000	310,000	163.16
Capital stock	2,100,000	1,770,000	330,000	18.64
Retained earnings	<u>520,000</u>	<u>550,000</u>	<u>(30,000)</u>	(5.45)
Total	<u>\$3,340,000</u>	<u>\$2,785,000</u>	<u>\$555,000</u>	19.93%

- (c) The component percentage (common-size) balance sheet makes easier analysis possible. It actually reduces total assets and total liabilities and stockholders' equity to a common base. Thus, the statement is simplified into figures that can be more readily grasped. It can also show relationships that might be out of line. For example, management might believe that accounts receivable of 6.59% is rather low. Perhaps the company is not granting enough credit. These percentages can be compared with those of other successful firms to see how the firm stands and to see where possible improvements could be made.
- (d) A statement such as that in part (b) is a good analysis and breakdown of the total change in assets and liabilities and stockholders' equity. The statement breaks down the 19.93% increase and makes it easier for analysts to spot any unusual items. The increase is explained on the asset side by an increase in accounts receivable, short-term investments, and fixed assets and on the liability side by an increase in bonds payable and capital stock. This statement makes analysis of the year's operations generally easier.

***PROBLEM 24-5**

(a) In establishing a dividend policy, the following factors should be taken into consideration:

- 1. The expansion plans or goals of the organization and the need for monies to finance new activities.**
- 2. The investment opportunities available to the enterprise versus the return available to stockholders on earnings distributed by way of a cash dividend.**
- 3. The possible effect on the market value of the enterprise's shares of instituting a dividend, and the possible effect on financing alternatives.**
- 4. The earnings ability and stability of the enterprise—past and future.**
- 5. The ability of the organization to maintain a given dividend in future years. To offer a dividend this year that cannot be maintained may be harmful. It could also be harmful to establish a policy seeming to call for increasing dividends over the years in the event the increase could not be kept up.**
- 6. The current position of the enterprise. Is cash available to pay the dividend? Will working capital be decreased to a dangerous level?**
- 7. The possibility of offering a stock dividend in addition to or rather than a cash dividend.**
- 8. The dividend policies of other similar organizations.**
- 9. The general condition of the economy in the area where the enterprise operates, as well as in the United States in general.**
- 10. The tax situation of the enterprise.**
- 11. Legal restrictions, such as a restrictive covenant in a bond indenture.**

***PROBLEM 24-5 (Continued)**

- 12. Personal tax situations of stockholders if known—whether preference for dividends or capital gains.**
- 13. Degree of dispersion of stockholdings and stockholders' needs or preference for dividends.**

(b)	2004	2003	2002	2001	2000
Rate of return on assets	<u>\$2,900</u>	<u>\$1,600</u>	<u>\$800</u>	<u>\$900</u>	<u>\$250</u>
	\$22,000	\$19,000	\$11,500	\$4,200	\$3,000
	<u>13.2%</u>	<u>8.4%</u>	<u>7.0%</u>	<u>21.4%</u>	<u>8.3%</u>
Profit margin on sales	<u>\$2,900</u>	<u>\$1,600</u>	<u>\$800</u>	<u>\$900</u>	<u>\$250</u>
	\$20,000	\$16,000	\$14,000	\$6,000	\$4,000
	<u>14.5%</u>	<u>10.0%</u>	<u>5.7%</u>	<u>15.0%</u>	<u>6.3%</u>
Earnings per share	<u>\$2,900</u>	<u>\$1,600</u>	<u>\$800</u>	<u>\$900</u>	<u>\$250</u>
	2,000	2,000	2,000	20	20
	<u>\$1.45</u>	<u>\$.80</u>	<u>\$.40</u>	<u>\$45.00</u>	<u>\$12.50</u>
Price-earnings ratio	<u>\$9</u>	<u>\$6</u>	<u>\$4</u>		
	\$1.45	\$.80	\$.40		
	6.2 times	7.5 times	10 times		
Current ratio	<u>\$8,000</u>	<u>\$6,000</u>	<u>\$3,000</u>	<u>\$1,200</u>	<u>\$1,000</u>
	\$4,400	\$2,800	\$1,800	\$700	\$600
	1.82 times	2.14 times	1.67 times	1.71 times	1.67 times

- (c) While the return on assets, profit margin on sales, and earnings per share have been increasing, the market price of the shares has not given full recognition to these increases. This suggests that market factors (and perhaps industry factors) are having a depressing effect on the market price of the shares. It may be suggested that the relatively low market price of the shares may be due, in part, to the fact that dividends have not been paid in the past. It may be concluded that the enterprise is in an improving operating position and appears to be able to pay a dividend (though the amount of cash is not given). It would, however, be wise to examine as many as possible of the other internal and external factors outlined in part (a) to this case.**

***PROBLEM 24-5 (Continued)**

A dividend in the range of 15¢ to 45¢ being 10% to 30% of earnings per share for 2004, would appear to be reasonable. Cash required would be \$300,000 ($\$.15 \times 2,000,000$) to \$900,000 ($\$.45 \times 2,000,000$). Payments considerably in excess of \$900,000 would appear to have a serious impact on working capital. This would provide a yield of between 1.7% and 5% on the average 2004 market value.

TIME AND PURPOSE OF CASES

Case 24-1 (Time 10-20 minutes)

Purpose—to provide the student with an understanding of the necessary information which must be disclosed in the financial statements with regard to certain asset classifications. The student is required to discuss each of these respective disclosures for Inventories and Property, Plant, and Equipment in the audited financial statements issued to the stockholders.

Case 24-2 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the necessary information which should be disclosed in the financial statements and notes. The student is required to evaluate the facts of four items concerning the company's operations and to discuss any additional disclosures in the financial statements and notes that the auditor should recommend with respect to these items.

Case 24-3 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the conditions under which note disclosures are necessary. The student is required to analyze three sets of circumstances and to prepare the respective notes where deemed to be necessary plus an explanation of the reasons for not making disclosures for those items in which a note was not prepared.

Case 24-4 (Time 24-30 minutes)

Purpose—to provide the student with an understanding of the types of disclosures which are necessitated under certain circumstances. This case involves three independent situations dealing with such concepts as warranty claims, a self-insurance contingency, and the discovery of a probable loss subsequent to the date of the financial statements. The student is required to discuss the accrual treatment and type of disclosure necessary and the reasons why such disclosure is appropriate for each of the three situations.

Case 24-5 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the proper accounting for subsequent event transactions. Bankruptcy, issue of debt, strikes, and other typical subsequent event transactions are presented.

Case 24-6 (Time 30-35 minutes)

Purpose—to provide the student with an understanding of segment reporting requirements, including providing explanations as to which segments are reportable.

Case 24-7 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of segment reporting. The case explores why a company did not have to prepare certain segment information. In addition, examination of when export sales should be disclosed is discussed. Finally, the student is asked to determine why international segments should be reported if significant international operations exist.

Case 24-8 (Time 24-30 minutes)

Purpose—to provide the student with an understanding of the concepts underlying the applications of segment reporting. The student is required to identify the reasons for requiring financial data to be reported by segments, the possible disadvantages of this requirement, and the accounting difficulties inherent in segment reporting.

Time and Purpose of Cases (Continued)

Case 24-9 (Time 20-25 minutes)

Purpose—to provide the student with an understanding of the applications and requirements of interim financial reporting. The student is required to explain how a company's operating results would be reflected in a quarterly report and describe what financial information must be disclosed to a company's stockholders in the quarterly reports.

Case 24-10 (Time 30-35 minutes)

Purpose—to provide the student with an understanding of the concepts of interim reporting and its respective applications to specific financial information. This case involves six independent examples on how accounting facts might be reported on a company's quarterly reports. The student is required to evaluate each example and state whether the method proposed to be used for interim reporting would be acceptable under generally accepted accounting principles applicable to interim financial data.

Case 24-11 (Time 24-30 minutes)

Purpose—to provide the student with an understanding of the conceptual merits underlying the preparation of financial forecasts. The student is required to discuss the arguments for preparing profit forecasts, the purpose of the "safe harbor" rule, and the reasons why corporations are concerned about presenting financial forecasts.

***Case 24-12** (Time 40-50 minutes)

Purpose—to provide the student with an understanding of an ethical dilemma that may arise in the future. In this case, the reason for the profit margin increasing is not properly described by the financial vice president and the controller realizes the misstatement. The question is what should the controller do?

***Case 24-13** (Time 24-35 minutes)

Purpose—to provide the student with an understanding of an ethical dilemma that may arise in the future. In this case, the company decides to delay the issuance of a debt offering to make their ratios look more impressive.

***Case 24-14** (Time 24-35 minutes)

Purpose—to provide the student with an understanding of the effects which various transactions have on a company's financial status. The student is required to decide for each of these transactions the respective effect on the company's net income, retained earnings, current ratio, stockholders' equity, and stockholders' equity per share of stock.

SOLUTIONS TO CASES

CASE 24-1

Dan D. Lion Corporation must disclose the following information regarding inventories:

1. The dollar amount assigned to inventory.
2. The method of inventory pricing; e.g., FIFO, LIFO, weighted average.
3. The basis of valuation; i.e., cost or lower of cost or market; if an amount other than cost is presented, then cost should still be presented by stating the amount of cost or by stating the amount of the valuation allowance.
4. The composition of the inventory into raw materials, work-in-process, and finished goods.

The following information must be disclosed for property, plant, and equipment:

1. The balance of major classes of depreciable assets (assets classified by nature or function).
2. Accumulated depreciation, either by major classes of depreciable assets or in total.
3. A general description of the methods used in computing depreciation on major classes of depreciable assets.
4. The amount of depreciation expense for the period.

The information regarding inventories and property, plant, and equipment will be disclosed in the body of the financial statements and in the notes which are an integral part of the statements.

CASE 24-2

Item 1

The staff auditor reviewing the loan agreement misinterpreted its requirements. Retained earnings are restricted in the amount of \$420,000, which was the balance of retained earnings at the date of the agreement. The nature and amount of the restriction should be disclosed in the balance sheet or a note to the financial statements.

Item 2

Unless cumulative preferred dividends are involved, no recommendation by the CPA is required. Common stock dividend policy is understood by readers of financial statements to be discretionary on the part of the board of directors. The company need not commit itself to a prospective common stock dividend policy or explain its historical policy in the financial statements, particularly since dividend policy is to be discussed in the president's letter. If cumulative preferred dividends are omitted, this should be disclosed in the financial statements or a note.

Note that the SEC encourages companies to disclose their dividend policy in their annual report. Those that: (1) have earnings but fail to pay dividends or (2) do not expect to pay dividends in the foreseeable future are encouraged to report this information. In addition, companies that show a consistent pattern of paying dividends are encouraged to indicate whether they intend to continue this practice in the future.

Item 3

A competitive development of this nature normally is considered to be the second type of subsequent event, one that provides evidence with respect to a condition that did not exist at the date of the balance sheet, but in some circumstances the auditor might conclude that Rem's poor competitive situation was evident at year-end. In any event, the development should be disclosed to users of the financial statements because the economic recoverability of the new plant is in doubt and Rem may incur substantial expenditures to modify its facilities. Because the economic effects probably cannot be determined, the usual disclosure will be in a note to the financial statements. If the present recoverable value of the plant can be determined, Rem should consider disclosure of the company's revised financial position in a pro-forma balance sheet, assuming that this event is concluded to be evidence of a condition that did not exist at year-end. (Only if circumstances were such that it was concluded that this condition did exist at year-end should the financial statements for the year ended December 31, 2004, be adjusted for the ascertainable economic effects of this development.)

CASE 24-2 (Continued)

Item 4

The lease agreement with Ancient National Bank meets the criteria for a capital lease because it contains a bargain purchase option (a 25-year-life building can be purchased at the end of 10 years for \$1). Additionally, unless the fair value of the building is considerably greater than its \$2,400,000 cost, the present value of the lease payments probably exceeds 90% of the fair value of the building. The lessee, therefore, must capitalize the leased asset and the related obligation in the balance sheet at the appropriate discounted amount of the future rental payments under the lease agreement. Via note, the lessee must disclose: (1) the gross amount of the leased asset and the accumulated depreciation thereon, (2) the future minimum lease payments as of the latest balance sheet date, in the aggregate and for each five succeeding fiscal years and for the amount of imputed interest necessary to reduce the lease payments to present value, (3) a general description of the lease arrangement, and (4) the existence of the terms of the purchase option. The income statement should contain a charge for depreciation of the leased asset plus an interest charge.

CASE 24-3

- (a) The auditor might recommend the following notes be appended to the financial statements in regard to item 2 and item 3.

Note A. In 2004 depreciation of plant assets is computed by the straight-line method. In prior years depreciation was computed using an accelerated method. The new method of depreciation was adopted in recognition of . . . (state justification for the change of depreciation method) . . . and has been applied retroactively to acquisitions of prior years to determine the cumulative effect. The effect of the change in 2004 was to increase (decrease) income before extraordinary item 1 (if any) by xxxx. The adjustment necessary for retroactive application of the new method, amounting to xxxx, is included in income in 2004. The pro-forma amounts shown on the income statement have been adjusted for the effect of retroactive application of depreciation and the pro-forma effect of related income taxes.

Other Observations

- 1 The change in method of computing depreciation for all fixed assets (previously recorded and future acquisitions) represents a change in accounting principle, as defined by the Accounting Principles Board in **Opinion No. 20**.
2. Accordingly, the cumulative effect of the change should be reflected in the current-year financial statements, and the financial statements included for comparative purposes should be presented as previously reported.
3. As a result of the change to straight-line, the current-year balance sheet will reflect a lower accumulated depreciation amount and the book value of the existing fixed assets will be increased. The current-year income statement will be affected directly in two specific areas: depreciation expense for the current period and an additional category of contra-expense shown after extraordinary items. The additional category of contra-expense is the cumulative effect of the change on the beginning retained earnings of the current period, as though the change had been applied in the earliest applicable period. The amount of this item is determined by recomputing earnings and retained earnings balances for all applicable prior periods as if the change had been applied retroactively. The difference between the recomputed retained earnings balance at the beginning of the current period and the original opening balance of retained earnings in the current period represents the contra-expense amount reflecting the cumulative effect of the change on prior-year financial statements.

CASE 24-3 (Continued)

The Accounting Principles Board also concluded that the effect of the change should be disclosed for the current period and on a pro-forma basis for all prior period financial statements included with the current financial statement for comparative purposes. The effect of the change in each instance should be disclosed for income before extraordinary items, net income, and all related per-share amounts.

Note B. The federal income tax return filed by the Corporation for the year 2001 is being examined by the Internal Revenue Service. The Internal Revenue Service has questioned the amount of a deduction claimed by the Company's domestic subsidiary for a loss sustained in 2001. The examination by the Internal Revenue Service has not progressed to the point that would indicate the extent of the Company's liability. The Company's tax counsel believes that the Company will not be subject to any substantial income tax liability with respect to this matter.

- (b) **Item 1.** Nonaccounting matters such as management changes and pending proxy fights are not disclosed unless such information is needed for the proper interpretation of the financial statements. The president should be informed that notes are an integral part of the financial statements and as such should be limited to information that relates to the financial statements. Furthermore, there is no certainty that a proxy fight will materialize and, hence, in view of the uncertainty no reason for note disclosure. Disclosure of events that have no relevance to those matters essential to proper interpretation of the financial statements frequently creates doubt as to the reasons for disclosure and inferences drawn could be misleading. Information about the pending proxy fight might be included in the president's letter to the stockholders, which is usually in a company's annual report.

CASE 24-4

Situation 1

When a company sells a product subject to a warranty, it is probable that there will be expenses incurred in future accounting periods relating to revenues recognized in the current period. As such, a liability has been incurred to honor the warranty at the same date as the recognition of the revenue. Based on prior experience or technical analysis, the occurrence of warranty claims can be reasonably estimated and a probable dollar estimate of the liability can be made. The contingent liability for warranties meets both of the requirements for the accrual of a loss contingency, and the estimated amount of the loss should be reflected in the financial statements. In addition to recording the accrual, it may be advisable to disclose the factors used in arriving at the estimate by means of a note, especially when there is a possibility of a greater loss than was accrued.

Situation 2

Even though: (1) there is a probable loss on the contract, (2) the amount of the loss can be reasonably estimated and (3) the likelihood of the loss was discovered prior to the issuance of the financial statements, the fact that the contract was entered into subsequent to the date of the financial statements precludes accrual of the loss contingency in financial statements for periods prior to the incurrence of the loss. However, the fact that a material loss has been incurred subsequent to the date of the financial statements but prior to their issuance should be disclosed by means of a note in the financial statements. The disclosure should contain the nature of the contingency and an estimate of the amount of the probable loss or a range into which the loss will probably fall.

Situation 3

The fact that a company chooses to self-insure the contingency of injury to others caused by its vehicles is not enough of a basis to accrue a loss contingency that has not occurred at the date of the financial statements. An accrual or "reserve" cannot be made for the amount of insurance premium that would have been paid had a policy been obtained to insure the company against this particular risk. A loss contingency may only be accrued if prior to the date of the financial statements a specific event has occurred that will impair an asset or create a liability and an amount related to that specific occurrence can be reasonably estimated. The fact that the company is self-insuring this risk should be disclosed by means of a note to alert the financial statement reader to the exposure created by the lack of insurance.

CASE 24-5

1. The financial statements should be adjusted for the expected loss pertaining to the remaining receivable of \$260,000. Such adjustment should reduce accounts receivable to its realizable value as of December 31, 2004.
2. Report the fire loss in a footnote to the balance sheet and refer to it in connection with the income statement, since earnings power is presumably affected.
3. Strikes are considered general knowledge and therefore disclosure is not required. Many auditors, however, would encourage disclosure in all cases.
4. This case is a difficult problem. If this event is of the second type which provides evidence with respect to conditions that did not exist at December 31, 2004, then appropriate disclosures should indicate that:
 - (a) Recovery of costs invested in plant and inventory is in doubt.
 - (b) The company may incur additional costs to modify the existing facility.
 - (c) Due to this situation, future economic events cannot be determined. (If we could determine them, pro-forma information might be appropriate.)

If it is the first type of subsequent event and the condition existed at December 31, 2004, then the financial statements must be adjusted. The provisions of **FASB No. 5** "Accounting for Contingencies" would govern if amounts could not be estimated. It should be emphasized in class that no right answer exists for this problem. Judgment must play a major role in determining the adjustment or disclosure necessary for this transaction.

5. Adjust the inventory figure as of December 31, 2004, as required by a market price of \$2.00 instead of \$1.40, applying the lower-of-cost-or-market principle. The actual quotation was a transitory error and no purchases had been made at this quotation.
6. Report the action of the new stock issue in a footnote to the balance sheet.

CASE 24-6

To: Vincent Price, Accountant
From: Student
Date: Current date
Subject: Determination of reportable segments for Vender Corp.

I have analyzed the segment information which you gave me and determined that the funeral, the cemetery, and the corporate segments must be reported separately. The remaining three—the limousine, floral, and dried whey segments—can be combined under the category of other.

To make this determination, I applied three criteria put forth by the FASB to the information provided from 2004. First, a segment must be reported separately if its revenue is greater than or equal to 10 percent of the enterprise's combined revenue. This is the case with both the funeral and the cemetery segments as revenue for both is greater than \$41,600 (10 percent of combined revenue).

Second, a segment is considered significant enough to be reported separately if its absolute operating profit or operating loss is greater than or equal to: (a) the combined operating profit of all segments without an operating loss or (b) the combined operating loss of all segments that incurred a loss. Combined operating profit for all profitable segments totals \$101,000. Both the funeral and the cemetery segments have operating profits exceeding total profits whereas the corporate segment's operating loss is greater than 10 percent of total profits. Thus, all three must be separately reported.

CASE 24-6 (Continued)

Third, a segment must be reported separately if its identifiable assets are greater than or equal to 10 percent of the combined identifiable assets for all segments. Again, the funeral, the cemetery, and the corporate segments meet this test. Note that the limousine, floral, and dried whey segments meet none of the above criteria, so they are not reported separately.

When reporting segment information, you must include the following items: revenues, operating profit (loss), identifiable assets, depreciation expense, and amount of capital expenditures. Furthermore, all segment information must be prepared on the same accounting basis as the consolidated entity's.

I hope that this information helps you in determining future reportable segments. If you have any other questions, please contact me.

CASE 24-7

- (a) Some companies such as H. J. Heinz have only one dominant product or service and therefore it is impossible to provide segmented data in a meaningful fashion. Dominant means that a given segment has 90% of all the sales, profit and identifiable assets of the company. In this case, segmented data are not provided, but the industry in which the dominant segment operates must be identified.
- (b) Export sales are sales to customers in foreign countries by a domestic operation. Export sales must be reported when a company derives 10% or more of its revenue (consolidated revenue) from this source.
- (c) Reporting sales by geographical area is extremely important. Many countries are both unstable politically and economically, and, as a result, sales to these areas should be evaluated carefully. Conversely, sales to countries that appear politically and economically stable suggest a high rate of continuance of sales to these areas.

CASE 24-8

- (a) Financial reporting for segments of a business enterprise involves reporting financial information on a less-than-total enterprise basis. These segments may be defined along organizational lines, such as divisions, branches, or subsidiaries. Segmentation could be based on areas of economic activity, such as industries in which the enterprise operates, product lines, types of services rendered, markets, types of customers, or geographical areas. In addition to these possible individual definitions of an enterprise's segments, a company may use more than one of the above-cited bases of segmentation.
- (b) The reasons for requiring financial data to be reported by segments include the following:
 - 1. They would provide more detailed disclosure of information needed by investors, creditors, and other users of financial statements.
 - 2. Appraisers can evaluate major segments of a business enterprise before considering the business in its entirety.
 - 3. In addition to being useful and desirable, such information is practical to compute.
 - 4. The growth potential of an enterprise can be evaluated by reviewing the growth potential of its major segments.
 - 5. Users can better assess management decisions to drop or add a segment.
 - 6. Projection of future earning power is made more effective when approached on a segment basis because different segments may have differing rates of growth, profitability, and degrees of risk.
 - 7. Managerial ability is better assessed with segment data because managerial responsibility within the enterprise is frequently decentralized.

CHAPTER 24-8 (Continued)

- (c) The possible disadvantages of requiring financial data to be reported by segments include the following:
1. They could be misinterpreted due to the public's general lack of appreciation of the limitations of the somewhat arbitrary bases for most allocations of common costs.
 2. They may disguise the interdependence of all the segments.
 3. They might result in misleading comparisons of segments of different enterprises.
 4. Confidential information would be revealed to competitors about profitable or unprofitable products, plans for new products or entries into new markets, apparent weaknesses that might induce competitors to increase their own efforts to take advantage of the weakness, and the existence of advantages not otherwise indicated.
 5. Information thus made available might cause customers to challenge prices to the disadvantage of the company.
 6. Operating data reported by segments might be misleading to those who read them. Segment data prepared for internal management purposes often include arbitrary judgments that are known to those using the data and taken into account in making evaluations. The difficulty of making such background information available and understandable to outside users is considered by many to be insurmountable.
 7. The cost of providing segment data for situations in which they are not now prepared could be significant.
 8. Uniform reporting categories would be established that might call for additional expense in recording and reporting and that, because arbitrarily defined, might not fairly represent the operations of the enterprise as a going concern. Some fear that establishment of arbitrary reporting requirements might in turn lead to arbitrary rules for business activities to make the required reporting possible.
- (d) The accounting difficulties inherent in segment reporting include the following:
1. The basis of segmentation must be established. [The various possible bases were cited in answer (a), above.]
 2. The transfer prices must be determined. Transfer prices are those charged when one segment deals with another segment of the same enterprise. Various possible transfer prices exist, and the company must select one.
 3. The method of reporting segment sales must be defined. A company may or may not include in its sales intercompany transactions with other segments within the enterprise.
 4. The computation of segment net income must be defined. The net income may be merely a contribution margin, that is, sales less variable costs, or a more conventional measure of net income. If a contribution-margin approach is used, the variable costs must be identified. If a more conventional measure of net income is used, the treatment of various items for each segment's net income must be established. Such items include the following:
 - a. Determining whether common costs should be allocated to segments.
 - b. Selecting allocation bases if common costs are to be allocated.
 - c. Determining which costs of capital (interest, preferred dividends, etc.) should be attributed to segments.
 - d. Determining whether extraordinary items and the cumulative effect of a change in accounting principle should be attributed to segments.
 - e. Determining how income tax should be allocated to segments.
 - f. Determining how a minority interest's share of income, and income from investee companies, should be attributed to segments.
 5. The segment information to be reported relating to a balance sheet and statement of cash flows must be established. This includes allocation of assets to various segments.
 6. The treatment of segment information in interim financial reports must be established.
 7. The method of presenting segment information in financial statements must be established. Such presentation may be by notes or by separate financial statements.
 8. The additional disclosures required, such as accounting policies used, must be established.
 9. The effect of annual comparisons must be considered. This would entail retroactive restatement of previously reported segment information presented currently for comparative purposes.

CASE 24-9

- (a) 1. The company should report its quarterly results as if each interim period is an integral part of the annual period. (See **APB Opinion No. 28**, "Interim Financial Reporting.")
2. The company's revenue and expenses would be reported as follows on its quarterly report prepared for the first quarter of the 2003–04 fiscal year:

Sales	\$60,000,000
Cost of goods sold	36,000,000
Variable selling expenses	2,000,000
Fixed selling expenses	
Advertising ($\$2,000,000 \div 4$)	500,000
Other ($\$3,000,000 - \$2,000,000$)	1,000,000

Sales and cost of goods sold receive the same treatment as if this were an annual report. Costs and expenses other than product costs should be charged to expense in interim periods as incurred or allocated among interim periods. Consequently, the variable selling expense and the portion of fixed selling expenses not related to the television advertising should be reported in full. One-fourth of the television advertising is reported as an expense in the first quarter, assuming TV advertising is constant throughout the year. These costs can be deferred within the fiscal period if the benefits of the expenditure clearly extend beyond the interim period in which the expenditure is made.

- (b) The financial information to be disclosed to its stockholders in its quarterly reports as a minimum include:
1. Sales or gross revenues, provision for income taxes, extraordinary items (including tax effects), cumulative effect of a change in accounting principle, and net income.
 2. Basic and diluted earnings per share.
 3. Seasonal revenue, costs or expenses.

CASE 24-10

- (a) Acceptable. The use of estimated gross profit rates to determine the cost of goods sold is acceptable for interim reporting purposes as long as the method and rates utilized are reasonable. The company should disclose the method employed and any significant adjustments which result from reconciliations with annual physical inventory.
- (b) Acceptable. Pension costs are more identifiable with a time period rather than with the sale of a product or service. Companies are encouraged to make quarterly estimates of those items that usually result in year-end adjustments. Consequently, it is acceptable to allocate this expense to each of the four interim periods.
- (c) Acceptable. Any loss in inventory value should be reported when the decline occurs. Any recoveries of the losses on the same inventory in later periods should be recognized as gains in the later interim periods of the same fiscal year. However, the gains should not exceed the previously recorded losses.
- (d) Not acceptable. Gains on the sale of investments would not be deferred if they occurred at year-end. Consequently, they should not be deferred to future interim periods but should be reported in the quarter the gain was realized.

CASE 24-10 (Continued)

- (e) Acceptable. The annual audit fee is an expense which benefits the company's entire year. Companies are encouraged to make quarterly estimates of these items that usually result in year-end adjustments. Therefore, this expense can be prorated over the four quarters.
- (f) Not acceptable. Revenue from products sold should be recognized as earned during the interim period on the same basis as followed for the full year. Because the company normally recognizes a sale when shipment occurs, it should recognize the revenue in the second quarter and not defer the revenue recognition. To do otherwise would be an inconsistent application of company accounting policy and violate general accounting rules for revenue recognition.

CASE 24-11

- (a) Arguments for requiring published forecasts:
 1. Investment decisions are based on future expectations; therefore, information about the future would facilitate better decisions.
 2. Forecasts are already circulated informally, but are uncontrolled, frequently misleading, and not available equally to all investors. This confused situation should be brought under control.
 3. Circumstances now change so rapidly that historical information is no longer adequate as a base of prediction.
- (b) The purpose of a safe harbor rule is to provide protection to an enterprise that presents an erroneous projection as long as the projections were prepared on a reasonable basis and were disclosed in good faith. An enterprise's concern with the safe harbor rule is that a jury's definition of reasonable might be at some variance from a company's or, for that matter, the SEC's.
- (c) An enterprise's concerns about preparing a forecast are as follows:
 1. No one can foretell the future. Therefore forecasts, while conveying an impression of precision about the future, will inevitably be wrong.
 2. Organizations will strive only to meet their published forecasts, not to produce results that are in the stockholders' best interest.
 3. When forecasts are not proved to be accurate, there will be recriminations and probably legal actions. Even with a safe harbor rule, enterprises are concerned because the definition of reasonable is subjective.
 4. Disclosure of forecasts will be detrimental to enterprises because it will fully inform not only investors, but also competitors (foreign and domestic).

***CASE 24-12**

- (a) The controller notes that the financial vice president is misrepresenting the financial condition of the company by suggesting that the company has become more efficient when, in fact, the improved ratio is gained through manipulation of estimates. The controller, however, hesitates because estimating does not follow precise, clear-cut rules. The dilemma exists because Maher is asked to weigh the benefits that may accrue to the company if its profit margin on sales appears much improved against the accountant's normal requirement to present financial information fairly (that is, in a manner that is consistent with previous reporting).
- (b) No, the controller should oppose the release of the publicity. The company has not improved its financial condition, and the claim of increased efficiency is not supported by the financial information.
- (c) The favorable media release enhances the current stockholders' position, as well as boosting the image of management. Such publicity may well contribute to an increased stock price. Future investors and stockholders are harmed because the media release depicts a misleading perspective on the financial condition of the company.

CASE 24-12 (Continued)

- (d) The controller is responsible for both the accuracy and the clarity of financial reporting. If the media release obscures how an accounting decision has influenced the apparent improvement of the company's financial condition, the controller cannot let this matter slide. Maher must protest and not let her name be connected to the misinformation.

CASE 24-13

- (a) The ethical issues involved are profitability, long-term versus short-term performance, and integrity of financial reporting.
- (b) Form should not dictate substance. The bonds should be issued when the company needs the cash to help improve its performance. Though ratios may be lower than desired if the bonds are issued immediately, the investors and creditors are served best when the company is performing at the highest possible level. If immediate cash inflow will assist enhanced performance, Holtzman should not delay issuance.

*CASE 24-14

- | | | | |
|------------|-----------|------------|----------|
| 1. e, h, i | 4. b, j | 7. e | 10. d, j |
| 2. a, e, i | 5. i*, a* | 8. a, e, i | |
| 3. b, j | 6. j | 9. b, e, j | |

*(Note to Instructor: Some students may indicate no effect since write-ups are not permitted.)

FINANCIAL REPORTING PROBLEM

- (a) 3M launched several initiatives in 2001 that minimized the impact of economic challenges. 3M's Indirect-Cost Control initiative saved over \$500 million compared with 2000. 3M expects another \$150 million of savings from this initiative in 2002. 3M's Sourcing initiative saved over \$100 million in 2001, with another \$150 million expected in 2002. Other initiatives include 3Productivity, where 3M believes it has a significant digitization opportunity, and expects \$50 million of benefits in 2002; 3M Acceleration, where R&D resources are reallocated to larger, more global projects; and Six Sigma, which focuses on higher growth, lower costs and greater cash flow, and from which 3M expects over \$200 million of operating income benefits in 2002.

These initiatives, combined with the company's restructuring plan, are expected to lower costs by more than \$1 billion during the 2001 to 2002 time period, even recognizing the initiatives' overlapping impact. These benefits have been built into the earnings projections discussed next.

- (b) For 2002 in total, earnings per share, excluding non-recurring items, are expected to be within a range of \$4.60 to \$5.05 per share. The lower end of the range assumes volume declines of 2 percent, while the top end assumes volume increases of 3 percent. The high end of the range assumes some global economic recovery in the second half of the year. However, first quarter 2002 will be a tougher comparison given that our businesses internationally remained quite strong at the beginning of 2001. Earnings for the first quarter of 2002, excluding non-recurring items, are expected to be within a range of \$1.05 to \$1.20 per share. The lower end of the range assumes volume declines of 6 percent, while the top end assumes volume declines of 3 percent. These ranges assume a positive 12 cent annual impact due to ceasing goodwill and indefinite-lived tradename amortization in accordance with the company's adoption of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," effective January 1, 2002.
- (c) Forward-looking statements are based on certain assumptions and expectations of future events that are subject to risks and uncertainties. Actual future results and trends may differ materially from historical results or those projected in any such forward-looking statements

FINANCIAL REPORTING PROBLEM (Continued)

depending on a variety of factors, including but not limited to the following:

- **The effects of, and changes in, worldwide economic conditions. The company operates in more than 60 countries and derives more than half of its revenues from outside the United States. The company's business may be affected by factors in the United States and other countries that are beyond its control, such as downturns in economic activity in a specific country or region; social, political or labor conditions in a specific country or region; or potential adverse foreign tax consequences.**
- **Foreign currency exchange rates and fluctuations in those rates may affect the company's ability to realize projected growth rates in its sales and net earnings and its results of operations. Because the company derives more than half its revenues from outside the United States, its ability to realize projected growth rates in sales and net earnings and results of operations could be adversely affected if the U.S. dollar strengthens significantly against foreign currencies.**
- **The company's growth objectives are largely dependent on the timing and market acceptance of its new product offerings, including its ability to renew its pipeline of new products and to bring those products to market. This ability may be adversely affected by difficulties or delays in product development, such as the inability to: identify viable new products; successfully complete clinical trials and obtain regulatory approvals; obtain adequate intellectual property protection; or gain market acceptance of new products.**
- **The company's future results are subject to fluctuations in the costs of purchased components and materials due to market demand, currency exchange risks, shortages and other factors. The company depends on various components and materials for the manufacturing of its products. Although the company has not experienced any difficulty in obtaining components and materials, it is possible that any of its supplier relationships could be terminated in the future. Any sustained interruption in the company's receipt of adequate supplies could have a material adverse effect on the company. In addition, while the company has a process to**

FINANCIAL REPORTING PROBLEM (Continued)

minimize volatility in component and material pricing, no assurance can be given that the company will be able to successfully manage price fluctuations due to market demand, currency risks or shortages, or that future price fluctuations will not have a material adverse effect on the company.

- The possibility that acquisitions, divestitures and strategic alliances may not meet sales and/or profit expectations. As part of the company's strategy for growth, the company has made and may continue to make acquisitions, divestitures and strategic alliances. However, there can be no assurance that these will be completed or beneficial to the company.
- The company is the subject of various legal proceedings. The current estimates of the potential impact on the company's consolidated financial position, results of operations and cash flows for its legal proceedings and claims are predictions made by the company about the future and should be considered forward-looking statements. These estimates could change in the future. For a more detailed discussion of the legal proceedings involving the company, see Note 21 in the Notes to Consolidated Financial Statements.

(d) **Financial Forecast.** Prospective financial statements that present, to the best of the responsible party's knowledge and belief, an entity's expected financial position, results of operations, and cash flows. A financial forecast is based on the responsible party's assumptions reflecting conditions it expects to exist and the course of action it expects to take.

Financial Projection. Prospective financial statements that present, to the best of the responsible party's knowledge and belief, given one or more hypothetical assumptions, an entity's expected financial position, results of operations, and cash flows. A financial projection is based on the responsible party's assumptions reflecting conditions it expects would exist and the course of action it expects would be taken, given one or more hypothetical assumptions.

The difference between a financial forecast and a financial projection is that a forecast attempts to provide information on what is expected to happen, whereas a projection may provide information on what is not necessarily expected to happen, but might take place.

FINANCIAL STATEMENT ANALYSIS CASE

TRI INC.

- (a) The calculation of selected financial ratios for TRI for the fiscal year 2004 is as follows:

$$\begin{aligned}\text{Current ratio} &= \frac{\text{Current assets}}{\text{Current liabilities}} \\ &= \frac{\$9,900}{\$6,300} \\ &= \underline{1.57}\end{aligned}$$

$$\begin{aligned}\text{Acid-test ratio} &= \frac{\text{Marketable Cash} + \text{Securities} + \text{Net Receivables}}{\text{Current liabilities}} \\ &= \frac{\$4,100}{\$6,300} \\ &= \underline{.65}\end{aligned}$$

$$\begin{aligned}\text{Times interest earned} &= \frac{\text{Income before interest and taxes}}{\text{Interest expense}} \\ &= \frac{\$7,060 + \$900}{\$900} \\ &= \underline{8.84}\end{aligned}$$

$$\begin{aligned}\text{Profit margin on sales} &= \frac{\text{Net income}}{\text{Net sales}} \\ &= \frac{\$4,160}{\$30,500} \\ &= \underline{13.64\%}\end{aligned}$$

FINANCIAL STATEMENT ANALYSIS CASE (Continued)

$$\begin{aligned}\text{Total debt to net worth} &= \frac{\text{Total debt}}{\text{Total shareholders' equity}} \\ &= \frac{\$8,300}{\$8,700} \\ &= \underline{\underline{.95}}\end{aligned}$$

$$\begin{aligned}\text{Asset turnover} &= \frac{\text{Net sales}}{\text{Average total assets}} \\ &= \frac{\$30,500}{(\$17,000 + \$16,000) \div 2} \\ &= \underline{\underline{1.85}} \text{ times}\end{aligned}$$

$$\begin{aligned}\text{Inventory turnover} &= \frac{\text{Cost of goods sold}}{\text{Average inventory}} \\ &= \frac{\$17,600}{(\$5,800 + \$5,400) \div 2} \\ &= \underline{\underline{3.14}} \text{ times}\end{aligned}$$

- (b) The analytical use of each of the seven ratios presented above and what investors can learn about TRI's financial stability and operating efficiency are presented below.

Current ratio

- Measures the ability to meet short-term obligations using short-term assets.
- TRI's current ratio has declined over the last three years from 1.62 to 1.57. This declining trend, coupled with the fact that it is below the industry average, is not yet a major concern; however, the company should be watched in the future as the ratio assumes that noncash current assets (particularly inventory) can be quickly converted to cash at or close to book value.

FINANCIAL STATEMENT ANALYSIS CASE (Continued)

Acid-test ratio

- **Measures the ability to meet short-term debt using the most liquid assets.**
- **TRI has improved its acid-test ratio over the last three years; however, it is still below the industry average. Furthermore, a quick ratio below 1 indicates that TRI may have difficulty meeting its short-term obligations if inventory does not turn over fast enough.**

Times interest earned

- **Measures the ability to meet interest commitments from current earnings. The higher the ratio, the more safety for long-term creditors.**
- **TRI's ratio has been improving over the last three years and is above the industry average. This provides an indication that TRI has been paying down or refinancing debt and/or increasing sales and profits, which indicates long-term stability.**

Profit margin on sales

- **Measures the net income generated by each dollar of sales. It provides some indication of the ability to absorb cost increases or sales declines.**
- **TRI's profit margin has been improving and is currently above the industry average, indicating a trend towards marginal operating efficiency. Furthermore, it improves the ability to absorb soft economic periods, pay down debt, or take on additional debt for expansion.**

Total debt to net worth

- **Measures how well protected creditors are in case of possible insolvency. Measures the degree of leverage and whether or not the entity will be able to obtain additional financing through borrowing.**
- **TRI's ratio has deteriorated in 2004 but has been below the industry average over the last three years. This indicates that TRI should be able to raise additional financing through debt and still remain below the industry average, which indicates there is long-term stability.**

FINANCIAL STATEMENT ANALYSIS CASE (Continued)

Total asset turnover

- **Measures the efficiency of resource use; i.e., the ability to generate sales through the use of assets.**
- **TRI's ratio has been steadily improving and is above the industry average, indicating good use of assets and ability to generate sales.**

Inventory turnover

- **Measures how quickly inventory is sold, as well as how effectively investment in inventory is used. It also provides a basis for determining if obsolete inventory is present or pricing problems exist.**
- **TRI's ratio has been steadily declining and is below the industry average. This slower-than-average situation may indicate a decline in operating efficiency, hidden obsolete inventory, or overpriced stock items.**

(c) Limitations of ratio analysis include:

- **Difficulty making comparisons among firms in the same industry due to accounting differences. Different accounting methods may cause different results in straight-line depreciation versus accelerated methods, LIFO versus FIFO, etc.**
- **The fact that no one ratio is conclusive.**

COMPARATIVE ANALYSIS CASE

THE COCA-COLA COMPANY VERSUS PEPSICO, INC.

- (a) (1) Coca-Cola commented on the following list of items in its note on accounting policies:

Organization/basis of presentation	Inventories
Consolidation	Property, plant, and equipment
Recoverability of investments	Other assets
Issuances of stock by equity investees	Trademarks and other intangible assets
Advertising costs	Use of estimates
Net income per share	New accounting standards
Cash equivalents	

- (2) PepsiCo commented on the following list of items in its note on accounting policies:

Items affecting comparability	Cash equivalents and short-term investments
Principles of consolidation	Inventories
Issuance of subsidiary stock	Property, plant, and equipment
Revenue recognition	Intangible assets
Marketing costs	Asset impairments
Distribution costs	Commitments and contingencies
Research and development costs	Income taxes
Stock-based compensation	Accounting changes
Derivative instruments and hedging	

- (3) Six of the items discussed in their notes on accounting policies are similar.

- (b) Coca-Cola divided its operations into six geographic segments: (1) North America, (2) Africa, (3) Europe, Eurasia, and Middle East, (4) Latin America, (5) Asia, and (6) corporate. PepsiCo divided its operations into four segments, with geographic subsegments: (1) Pepsi-Cola North America and Pepsi-Cola International, (2) Frito-Lay, North America and International, (3) Gatorade/Tropicana, North America, and (4) Quaker Foods, North America.

- (c) Coca-Cola's independent auditors are Ernst & Young, while PepsiCo's independent auditors are KPMG Peat Marwick.

COMPARATIVE ANALYSIS CASE (Continued)

The first three paragraphs of both Coca-Cola's and PepsiCo's audit reports are nearly identical in wording. Coca-Cola has a fourth paragraph which indicates that it changed its method of accounting for derivative instruments and hedging activities.

RESEARCH CASES

CASE 1

- (a) The FASB has not set better rules because of objections from various parties, particularly companies that would have to disclose that they carried more debt than they were reporting to their shareholders.
- (b) Investors and creditors are misled if off-balance-sheet debt is not reported in the financial statements. A misallocation of resources in our economy may result. It should be noted that in the long run, we all lose, even the companies. As their lack of transparency becomes obvious to the market, a reduction in share price is usually swift and significant; auditors also lose because their credibility is questioned.
- (c) It causes financial information to be less useful because it lacks transparency and clarity. Once we start issuing standards that are biased, we have violated the qualitative characteristic of neutrality.
- (d) Congress itself has been supportive of industry, not the FASB to a great extent, when a controversial proposal related to an accounting standard has been developed. For example, as cited in the article, Joseph Lieberman (D. Conn.) introduced a proposal to strip the FASB of its authority to enact accounting standards if it carried out its plan to record employee stock-option-payments as expenses on their income statement.
- (e) The FEI has been part of the problem, not part of the solution. Time and again the FEI has attempted to block standards that would place companies in a bad light or would lead to increased volatility in income figures. Hopefully, due to recent events, the FEI will take a more statesman-like position on matters before the FASB in the future.

CASE 2

- (a) Part I of the 10-Q should include financial statements and management's discussion and analysis of financial condition and results of operations.
- (b) Answer depends on the company selected.
- (c) Part II may include information regarding: (1) results of legal proceedings, (2) changes in securities, (3) defaults upon senior securities, (4) submission of matters to a vote of security holders, or (5) other information deemed relevant.

PROFESSIONAL SIMULATION

Analysis

The current-ratio increase is a favorable indication as to solvency, but alone tells little about the going-concern 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 acid-test ratio is an unfavorable indication as to solvency, especially when the current ratio increase is also considered. This decline is also unfavorable to the going-concern prospects of the client because it reflects a declining cash position and raises questions as to reasons for the increases in other current assets, such as inventories.

The increase in the ratio of property, plant, and equipment to stockholders' equity cannot alone tell anything about either solvency or going-concern prospects. There is no way to know the amount and direction of the changes in the two items. If assets increased, one must know whether the new assets are immediately productive or need further development. A reduction in stockholders' equity at this point would cause much concern for the creditors of this client.

The decrease in the ratio of sales to stockholders' equity is in itself an unfavorable indicator because the most likely reason is a sales decline. However, this decline, which is more relevant to going-concern prospects than to solvency, is largely offset by the fact that net income has significantly increased.

The increase in net income is a favorable indicator for both solvency and going-concern 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.

PROFESSIONAL SIMULATION (Continued)

The 32-percent increase in earnings per common share, which is identical to the percentage increase in net income, is an indication that there has probably been no change in the number of shares of common stock outstanding. This in turn indicates that financing was not obtained through the issuance of common stock. It is not possible to reach conclusions about solvency and going-concern prospects without additional information about the nature and extent of financing.

The percentage increases in book value per common share demonstrate nothing so far as solvency and going-concern potential are concerned. It is probable that the smaller percentage increase in the current year only reflects the larger base value created in the preceding year. It is not possible to tell from these figures what the dividend policy of the client is or whether there is an increase in net assets which is capable of generating future earnings, thus making it possible to raise capital for current needs by the issue of additional common stock.

The collective implications of these data alone are that the client entity is about as solvent and as viable as a going concern at the end of the current year as it was at the beginning although there may be a need for short-term operating cash.

Explanation

The creditors will probably ask for the information listed below to overcome the limitations inherent in the ratios discussed above and to obtain more evidence to support the conclusions drawn from them.

1. Additional ratios and other comparative data may be requested. They are likely to include such items as the following:
 - a. Changes in current assets other than quick assets.
 - b. Receivables turnover, inventory turnover, and the number of days it takes to complete the cycle from cash to inventories to receivables to cash.
 - c. Liabilities to stockholders' equity.
2. The creditors will probably want explanations for the changes in ratios during the current year. The client should be prepared to respond to questions about the age and collectibility of the receivables, the condition and salability of the inventories, the cause of the quick-asset position in the current year, the nature of increases in property, plant, and equipment and their potential for providing greater sales or cost reductions in the future, the presence of long-term debt and the

PROFESSIONAL SIMULATION (Continued)

dates when it must be repaid, and the manner of controlling costs so that a larger net income was shown in the current year. (The comparative financial statements themselves will answer many of these questions and will provide insight into the client's capability of meeting current obligations as well as continuing profitable operations.) The client may also be expected to provide information about future plans and projections.

- 3. The creditors may also ask for ratios and related information for several recent years. These data may demonstrate trends and can be compared to data for other companies and for the industry.**

Although a quick evaluation of a reporting entity can be made using only a few ratios and comparing these with past ratios and industry statistics, the creditors should realize the limitations of such analysis even from the best prepared statements carrying a CPA's unqualified opinion.

A limitation on comparisons with industry statistics or other companies within the industry exists because material differences can be created through the use of alternative (but acceptable) accounting methods. Further, when evaluating changes in ratios or percentages, the evaluation should be directed to the nature of the item being evaluated because very small differences in ratios or percentages can represent significant changes in dollar amounts or trends.

The creditors should evaluate conclusions drawn from ratio analysis in the light of the current status of, and expected changes in, such things as general economic conditions, the client's competitive position, the public's demand (for the product itself, increased quality of the product, control of noise and pollution, etc.), and the client's specific plans.