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OBJECTIVES

After reading this chapter, you will be able to:

- 1 Describe an auditor's report.
- 2 Understand the meaning of an operating segment.
- 3 Describe the disclosures in a segment report.
- 4 Explain interim reporting.
- 5 Prepare an interim report.
- 6 Understand intracompany and intercompany comparisons (Appendix).
- 7 Prepare horizontal and vertical percentage analyses (Appendix).
- 8 Perform ratio analysis (Appendix).

Additional Aspects of Financial Reporting and Financial Analysis

Can You Hear Me Now?

The rapid advancement of information technology, particularly the Internet and related technologies, has dramatically changed the way information flows between companies and users of financial information. It also presents unique opportunities and challenges for the financial reporting community. By leveraging technology, companies can provide investors with an expanded menu of relevant and timely information, such as audio and video clips of conference calls, downloadable spreadsheets that allow interactive analysis, and customer access to company databases. While the use of the Internet for financial reporting presents great opportunities, many challenges exist with regard to the quality, security, and reliability of electronic-based financial information.

Recognizing that the Internet has changed the way companies communicate with investors, creditors, and others, many have begun to embrace a technology known as **XBRL** (e**X**tensible **B**usiness **R**eporting **L**anguage) that may revolutionize financial reporting. XBRL is an Internet language for business reporting that will make it easier for users to extract and analyze information contained in annual reports, press releases, and other communications by directing that information into the many analytical tools they use. A recent forecast by a Big Four accounting firm has identified XBRL as one of the technologies that will most affect business in the coming years. With the

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Securities and Exchange Commission's decision to allow voluntary filing of supplemental financial information using XBRL, its usage will almost certainly grow. The use of technologies such as XBRL should lead to improvements in communication between companies and investors and has the potential to contribute significantly to enhancing the transparency of financial reporting.

FOR FURTHER INVESTIGATION

For a discussion of the use of technology in financial reporting, consult the Business & Company Resource Center (BCRC):

- XBRL A Work in Progress: Accountants are taking a leadership role in making a breakthrough in financial reporting. Jeff Stimpson, *The Practical Accountant*, 0032-6321, June 2004, v37, i6, p39(4).
- Tap into XBRL's Power the Easy Way: the Microsoft Office Tool for XBRL benefits all financial reporting participants. Jeffrey W. Naumann, *Journal of Accountancy*, 0021-8448, May 2004, v197, i5, p32(8).

A company's financial statements summarize its various financial activities and operations. External users analyze the information in these statements and relate it to other information for many reasons. Current stockholders, for example, are concerned about their investment income, as well as about the company's future profitability and stability. Some potential investors are interested in "safe" companies, with stable earnings and dividends, and limited or moderate growth. Others prefer companies with a trend for financial flexibility, rapid growth, and diversification into different lines of business. Short-term creditors are interested in a company's short-run liquidity—its ability to pay current obligations as they mature. Long-term creditors are concerned about the long-term security of their interest income. These are just a few of the users and uses of financial statements.

This book is designed for *preparers* of **general purpose** financial statements—statements that serve the needs of many types of external users. The information in these statements should be understandable to users who are reasonably knowledgeable about business and economic activities and who are willing to carefully study the information.¹ These general purpose financial statements are published in a corporation's **annual report** to its stockholders. Besides the financial statements and accompanying notes, an annual report includes many items. These include the auditor's report, the report of management, and management's discussion and analysis. Companies also prepare *interim reports*. Many companies include their financial statements and additional financial information on their web sites on the Internet. However, users should be careful because companies sometimes only provide summary information. Accountants must be familiar with these additional aspects of financial reporting.

Accountants, in the role of *preparers of financial statements*, do not themselves use the statements for investment and credit decisions. However, a better understanding of how external users analyze the data contained in the financial statements can lead to insights on how to improve that information. In some cases, companies may be required or may choose to present certain reports and analyses in their annual reports as an aid to external users, and accountants must know how to prepare these documents. Finally, accountants often are asked by management, lending institutions, and other groups to provide additional analyses of the financial statements.

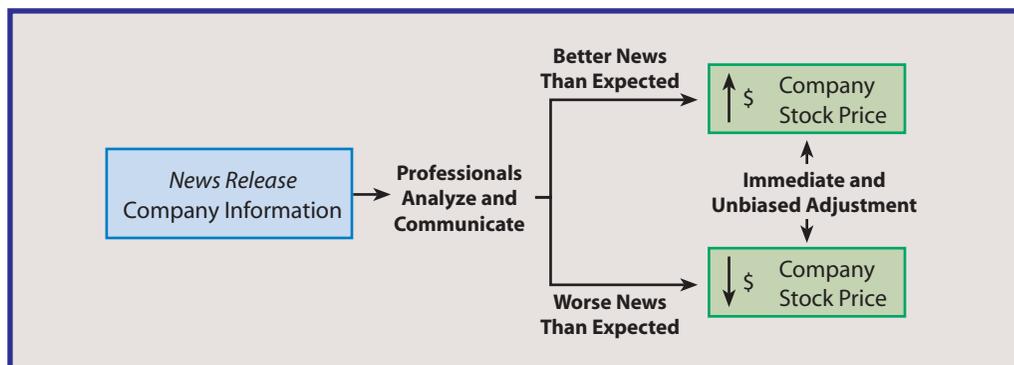
We include in this chapter a discussion of (1) market efficiency, (2) the auditor's report, (3) the report of management, (4) segment reports, (5) interim reports, and (6) SEC reports. We also discuss various aspects of financial analysis, including an Appendix that covers financial analysis comparisons as well as a horizontal analysis, vertical analysis, and ratio analysis.

MARKET EFFICIENCY

During the past 20 years, research studies have examined the **efficient markets** hypothesis. Evidence from this research tends to show that (1) the prices of securities traded in the capital markets fully reflect all *publicly* available information, and (2) these prices are adjusted almost *immediately* based on new information and in an *unbiased* manner. That is, as soon as new information becomes publicly available, it is interpreted, analyzed, and incorporated into the market prices. New information about companies may include, for instance, earnings amounts, cash flow and accrual components of earnings, and differences in accounting methods across companies. Information about companies becomes publicly available in a variety of ways, including news releases reported on the Internet and in newspapers such as *The Wall Street Journal*, and in published management forecasts, interim financial statements, and annual reports. The market prices adjust in an

1. "Objectives of Financial Reporting by Business Enterprises," *FASB Statement of Financial Accounting Concepts No. 1* (Stamford, Conn.: FASB, 1978), par. 34.

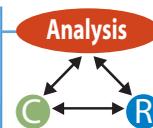
immediate and unbiased manner because of the market communication system and the sophistication of investors (professionals such as security analysts and stockbrokers) who continuously gather, interpret, analyze, and process information. We show this process in the following diagram.



An efficient capital market means that an individual investor cannot use published information to earn an “abnormal” return on a security investment with a given amount of risk. That is, all securities with a similar amount of risk will yield approximately the same rate of return; only through the use of “insider information” can abnormal returns be obtained. On the other hand, some research appears to show that the market may not always be efficient. That is, the market may be mispricing the accrual component of earnings, thereby mispricing securities and enabling an astute investor to earn an abnormal return. If the efficient markets hypothesis is reasonably valid, how does the related research affect financial reporting and financial analysis, the topics of this chapter?

Since the market efficiently processes many types of public information, **full disclosure** of financial information is important for two reasons. First, full disclosure (so that the information becomes “public”) helps to prevent the use of insider information by unscrupulous investors to earn abnormal returns. Second, full disclosure (at a reasonable cost) in the financial statements, the accompanying notes, or by other means helps the market operate efficiently and in a cost-effective fashion.

The efficiency of the capital markets does not detract from the use of various financial analysis techniques. In fact, one of the reasons why the markets tend to be efficient is because professional analysts interpret and analyze the information. Furthermore, financial analysis techniques are useful in situations where an investor is considering the investment potential of a company whose securities are *not* traded in an organized capital market, where a financial institution is considering a lending arrangement with a company, or where a company must be monitored to make sure that it is adhering to any financial restrictions set by various lending agreements. Finally, not all investors believe in the efficient market hypothesis; some continue to use financial analysis techniques to try to earn abnormal returns.²



2. For a further discussion of efficient capital markets research and its implications, see D. C. Nichols and J. M. Wahlen, “How Do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence,” *Accounting Horizons* (December 2004), pp. 263–286; R. L. Watts and J. L. Zimmerman, “Positive Accounting Theory: A Ten Year Perspective,” *The Accounting Review* (January 1990), pp. 131–156; T. R. Dyckman and D. Morse, *Efficient Capital Markets and Accounting: A Critical Analysis*, 2d ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1986); and W. H. Beaven, *Financial Reporting: An Accounting Revolution*, 3rd ed. (Upper Saddle River, N.J.: Prentice Hall, 1998).

AUDITOR'S REPORT (OPINION)

Many investment and credit decisions are based on the information presented in a company's financial statements, which are prepared by and are the responsibility of its management. To provide an external perspective, most published financial statements are audited by an *independent* certified public accountant. In an **audit** of a public company, the certified public accountant conducts an examination of the company's internal control over its financial reporting, as well as its accounting system, records, and financial statements in accordance with generally accepted auditing standards. The Public Company Accounting Oversight Board sets these auditing standards. Based on this examination, the auditor issues an **audit report**, which expresses three opinions:

1 Describe an auditor's report.



1. That management's assessment that the company maintained internal control over its financial reporting is fairly stated
2. That the company maintained effective internal control over its financial reporting
3. That the company's financial statements present fairly the financial position of the company and the results of its operations and cash flows in conformity with accounting principles generally accepted in the United States of America.

The management of a company is responsible for maintaining internal control over the company's financial reporting. This means that the company

- has a reliable accounting system in which its transactions are appropriately recorded and stored,
- maintains records in reasonable detail that accurately reflect its transactions and events,
- has a process for providing reliable financial statements prepared according to GAAP, and
- has adequate procedures for preventing or detecting significant unauthorized acquisition, use, or disposal of its assets.

Before the company issues its financial statements, the company's management must evaluate the effectiveness of this internal control and must issue a report (we discuss this report in a later section) assessing this effectiveness.

As we noted earlier, the company's auditor then must express an opinion on whether the management's internal control assessment report is appropriate and whether the company did, in fact, maintain internal control over its financial reporting. To form a basis for issuing these opinions, the auditor must carefully examine (audit) the company's internal control system. The auditor must also audit (and issue an opinion on) the company's financial statements at the same time. This is necessary because the information obtained during the financial statement audit is relevant to the auditor's conclusion about the company's internal control over its financial reporting.



An audit report is *not* part of the financial statements because it is a report by the independent auditor. Nonetheless, it is considered an important item of information because external users place reliance on the report as to the fairness of the financial statements. The "standard" form of an auditor's report on *comparative* financial statements (often referred to as an *unqualified* report) is shown in Exhibit 6-1.³ (The audit report of **The Coca-Cola Company** is shown in Appendix A at the end of this book.)

An audit report consists of five paragraphs. The first paragraph, known as the **introductory paragraph**, lists the financial statements that were audited, indicates that management's assessment of internal control was audited, declares that management is

3. Adapted from "An Audit of Internal Control Over Financial Reporting Performed in Conjunction with An Audit of Financial Statements," *Auditing Standard No. 2* (PCAOB, March 9, 2004), Example A-7.

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responsible for the financial statements and related internal control, and asserts that the auditor is responsible for expressing three related opinions.

The second paragraph, known as the **scope paragraph**, describes what the auditor has done. Specifically, it states that the auditor has examined the financial statements and related internal control in accordance with generally accepted auditing standards, performed appropriate tests, and obtained an understanding of the company's internal control. The auditor does not examine all the information used to prepare the financial statements, but performs tests to evaluate the reasonableness of the information and related internal control. The auditor uses skills and judgment in deciding what evidence to examine, when to examine it, and how much to examine. As we see throughout this book, financial statements include many estimates made by management. An auditor also designs tests to evaluate the reasonableness of the assumptions and other factors used in the estimates. Because estimates are inherently imprecise, the auditor's involvement supports their reasonableness but does not guarantee their accuracy.

The third paragraph, known as the **definition paragraph**, defines internal control over financial reporting. It identifies the policies and procedures related to this internal control. The fourth paragraph, known as the **inherent limitations paragraph**, discusses the possibility that internal control over financial reporting may not prevent or detect misstatements of the financial statements. It also addresses the risk that current controls may become inadequate in the future.

The fifth paragraph, known as the **opinion paragraph**, gives the auditor's opinions. Like a doctor or lawyer, an auditor's opinion is based on professional judgment, not absolute certainty. When the financial statement opinion is unqualified, the auditor states that the financial statements present *fairly* in accordance with *generally accepted accounting principles* (GAAP). Thus the emphasis is not on presenting "fairly" in some general sense of the word but on presenting in accordance with GAAP. In other words, GAAP is defined as being fair. Therefore, the user of the financial statements must understand GAAP to be able to understand and interpret the statements. (In exceptional cases, the management of the company and the auditor may agree that a method other than GAAP provides more useful and "fairer" information about a transaction or event. In such a case, the non-GAAP method is fully disclosed.) The financial statement opinion also

EXHIBIT 6-1 Unqualified Audit Report**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We have audited the accompanying balance sheets of W Company as of December 31, 20X7 and 20X6, and the related statements of income, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended December 31, 20X7. We also have audited management's assessment, included in the accompanying [title of management's report], that W Company maintained effective internal control over financial reporting as of December 31, 20X7, based on [Identify control criteria]. W Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on these financial statements, an opinion on management's assessment, and an opinion on the effectiveness of the company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

(continued)

emphasizes that the statements comply with GAAP in all *material* respects; that is, the financial statements are free of material misstatements rather than precisely accurate. The paragraph concludes with the two opinions about management's assessment of the company's internal control over its financial reporting and whether this internal control was maintained by the company. An audit enhances the confidence of users because the auditor is an objective, independent expert who is knowledgeable about the company's business, internal control, and financial reporting requirements.

Note that there are three things that the audit report does *not* say. First, an unqualified opinion is not a "clean bill of health." The report does not, for example, endorse a company's policy decisions or its use of resources. Second, an unqualified opinion provides

EXHIBIT 6-1 (Continued)

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of W Company as of December 31, 20X7 and 20X6, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 20X7, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, management's assessment that W Company maintained effective internal control over financial reporting as of December 31, 20X6, is fairly stated, in all material respects, based on [Identify control criteria]. Furthermore, in our opinion, W Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 20X7, based on [Identify control criteria].

[Signature]

[City and State or Country]

[Date]

no assurance of the future success of the company. Generally accepted auditing standards include procedures to be followed to examine the financial viability of the company. However, a company may suffer financial difficulty, or even failure, within a relatively short time of receiving an unqualified opinion, a situation that does not necessarily indicate that the audit was negligent. In other words, there is a difference between a business failure and an audit failure. Third, although an audit assesses a company's internal controls, an audit report does not provide an assurance that fraud has not been committed by a member(s) of the company unless such fraud is material. An audit is planned and performed with professional skepticism. The auditor assesses the risk of material misstatement and designs the audit to provide reasonable assurance of detection of significant errors or fraud. However, fraud that is concealed through forgery and collusion among the personnel of the company, especially management, may escape detection by the auditor. For large companies, such fraud would have to involve millions of dollars to be material.

In certain circumstances a qualified opinion, adverse opinion, or disclaimer of opinion may be expressed by the independent auditor in any of the three opinions. A *qualified* opinion states that except for the effects of the qualified item, the internal control was maintained or the financial statements present fairly the information in conformity with GAAP. An *adverse* opinion states that the internal control was not maintained or the financial statements do not present fairly the information in conformity with GAAP. A *disclaimer* of opinion states that the auditor does not express an opinion. These types of reports and opinions are discussed more fully in standard auditing books.

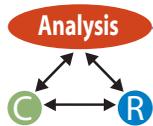


AUDIT COMMITTEE AND MANAGEMENT'S REPORT

Audit committees have existed for many years. The SEC requires all publicly-held companies to have an audit committee. An **audit committee is a group that has oversight over the financial reporting process of a company.** Since an auditor must closely communicate with a company's management, the possibility exists that the auditor will not maintain

independence from this management. A lack of independence would reduce the reliability that external users place on the company's financial statements. Consequently, a primary responsibility of an audit committee is to help maintain auditor independence. Therefore, most audit committee members usually are "outside directors" (not officers or employees of the company). The audit committee acts as the liaison between the auditor and management. Although the duties of an audit committee vary among companies, generally an audit committee of a company: (1) oversees the internal control structure, (2) helps in the selection of accounting policies, (3) helps select the auditor, (4) approves all auditing services, (5) reviews the audit plan, (6) reviews suggestions by auditors concerning weaknesses in internal control, and (7) reviews the financial statements (both interim and annual) and audit report. Use of an audit committee enhances the credibility of a company's financial statements.

As we noted earlier, **the preparation and presentation of a company's financial statements are the responsibility of its management.** In the past, many external users have had the mistaken impression that because auditors reviewed the financial statements, the financial statements were the responsibility of the auditor. Then, if a company experienced financial difficulties that resulted in a "business failure," they erroneously thought this was an "audit failure." Consequently, officers of companies are encouraged to acknowledge their responsibilities regarding financial statements. Although not part of the financial statements, companies include a "**Management Report**" section in their annual report. In this report management acknowledges that it is responsible for preparing and presenting the financial statements. Furthermore, since sound internal control plays a vital role in these activities, the management of each public company is required to "certify" that



- the company's financial statements are not misleading and are fairly presented,
- it is responsible for designing and maintaining appropriate internal controls,
- it has evaluated the effectiveness of these internal controls and issued a report about the effectiveness of these controls, and
- it has communicated to the company's auditors and audit committee any significant deficiencies in these internal controls.

Finally, the report may identify the independent auditor's responsibilities. An example of the management report section of **Wachovia Corporation** is shown in Real Report 6-1. Note the references to management's responsibility, the auditor's role, internal control, and the reference to the auditor's reports.



Real Report 6-1 Management's Report

WACHOVIA CORPORATION AND SUBSIDIARIES

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of Wachovia Corporation and subsidiaries (the "Company") is responsible for establishing and maintaining effective internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Under the supervision and with the participation of management, including the principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation under the framework in Internal Control – Integrated Framework, management of the Company has

Continued

concluded the Company maintained effective internal control over financial reporting, as such term is defined in Securities Exchange Act of 1934 Rules 13a-15(f), as of December 31, 2004.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting can also be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Management is also responsible for the preparation and fair presentation of the consolidated financial statements and other financial information contained in this report. The accompanying consolidated financial statements were prepared in conformity with U.S. generally accepted accounting principles and include, as necessary, best estimates and judgments by management.

KPMG LLP, an independent, registered public accounting firm, has audited the Company's consolidated financial statements as of and for the year ended December 31, 2004, and the Company's assertion as to the effectiveness of internal control over financial reporting as of December 31, 2004, as stated in their reports, which are included herein.

Questions:

1. What does Wachovia Corporation say about its internal controls?
2. What do you think "reasonable assurance" means?



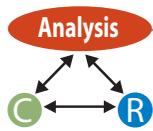
SECURE YOUR KNOWLEDGE 6-1

- Market efficiency, the relation between security prices and information, has implications for financial reporting, including the ability to earn abnormal returns based on reported financial information, as well as the form and content of financial statement disclosures.
- To provide assurance to external users about the quality of the financial information in the financial statements, auditors examine the effectiveness of a company's internal control over its financial reporting, as well as the company's accounting system, records, and financial statements.
- The audit report consists of an introductory paragraph, a scope paragraph, a definition paragraph, an inherent limitations paragraph, and an opinion paragraph.
- The "Management's Report" section of an annual report contains management's statement of responsibility for, and certification of, the company's financial statements and internal controls relating to the financial reporting process.

SEGMENT REPORTING

A company that has subsidiaries prepares its financial statements on a "consolidated" basis. That is, the accounting results of its various legal entities are *aggregated* into a set of financial statements for the entire economic entity (briefly discussed in Chapter 15).

Although investors and creditors know the importance of consolidated statements in evaluating overall company performance, the *disaggregation* of total financial data also can be important in their financial analysis.



The evaluations of risk and return are significant factors in investment and credit decisions. Risk may result from a number of factors including:

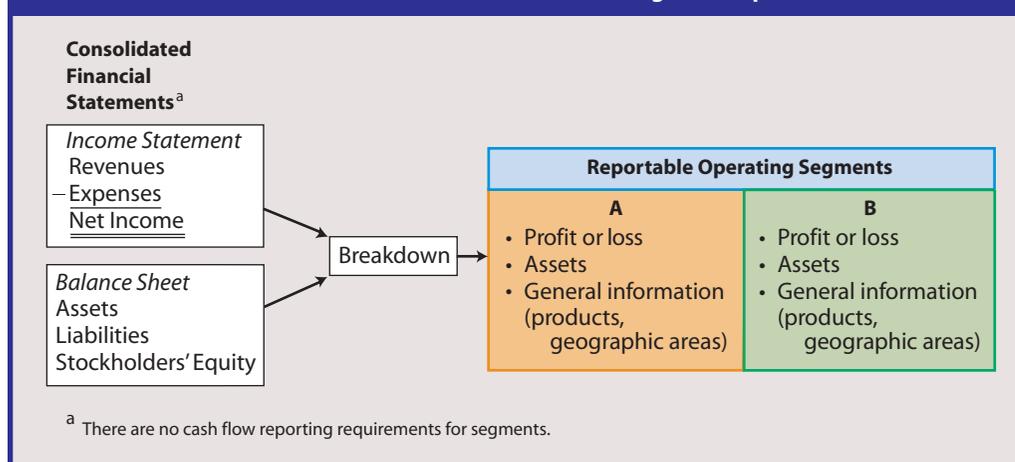
- the way that a company is organized and how its divisions are operated
- the nature of the economies in which the company operates
- the changing conditions in the geographic areas where the company operates
- the characteristics of its major customers

The profitability or return offered by a company also is affected by the same factors.

A company improves the financial analysis information on risk and return by presenting disaggregated financial information about its operating segments. The AICPA Special Committee on Financial Reporting considers operating segment reporting to be very important. It suggests that a company should provide disaggregated information on segments if they are critical “drivers” of the company’s risks and opportunities. The information reported should be based on the way in which the company uses the information for internal reporting to operate its business.⁴

In light of the need for operating segment information, the FASB, in cooperation with its counterpart in Canada, issued **FASB Statement No. 131**, which requires that a company’s financial statements include certain disaggregated information about its operations.⁵ Exhibit 6-2 shows a diagram of the “breakdown” between a company’s consolidated financial statements and its reportable operating segments. In the next sections we discuss how this breakdown (disaggregation) is done.

EXHIBIT 6-2 Consolidated Financial Statements and Segment Reports



Reporting on Operating Segments

A company’s financial statements might be disaggregated in a number of ways, such as by products and services, geography, legal entity, or type of customer. The way a company identifies its operating segments for financial reporting is through the use of the

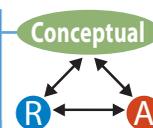
2 Understand the meaning of an operating segment.

4. “Improving Business Reporting—A Customer Focus,” *AICPA Special Committee on Financial Reporting* (New York: AICPA, 1994), pp. 10 and 140.
5. “Disclosures about Segments of an Enterprise and Related Information,” *FASB Statement of Financial Accounting Standards No. 131* (Norwalk, Conn.: FASB, 1997), par. 1. Nonpublic companies, those whose securities are not traded publicly or that are not required to file financial statements with the SEC, are not required to report segment information.

“management approach.” The management approach is based on the way a company’s management organizes the company’s segments for making operating decisions and for assessing performance. Thus, an operating segment is a component of a company:

1. that engages in business activities to earn revenues and incur expenses,
2. whose operating results are regularly reviewed by the company’s chief operating officer to make decisions about allocating resources to the segment and assessing its performance, and
3. for which financial information is available.

Not all departments in a company are operating segments. For instance, a corporate headquarters normally does not earn revenues directly and is not an operating segment. Generally, an operating segment has a *segment manager* who is directly accountable for the segment’s operating activities, and who maintains regular contact with the chief operating officer.



Reportable Segments

A company does not have to provide financial information about all its operating segments, however. Materiality determines whether or not a segment is a **reportable segment**—one whose operations are significant enough that its financial activities must be reported. An operating segment is significant and is a reportable segment if it satisfies at least *one* of the three following tests:

1. *Revenue Test*. Its reported revenues (including sales to external customers and inter-segment sales) are 10% or more of the combined revenues of all the company’s reported operating segments.
2. *Profit Test*. The absolute amount of its profit (loss) is 10% or more of the combined reported profits of all operating segments that did not report a loss.⁶
3. *Asset Test*. Its segment assets are 10% or more of the combined assets of all operating segments.

We discuss the terms “revenues,” “profit (and loss),” and “segment assets” as applied in this *Statement* in the next section.

In addition to these tests, there is an overall materiality test. This test requires that the reportable segments must be a substantial portion of the company’s total operations. That is, enough reportable segments must be disclosed so that their combined revenues are at least 75% of the entire company revenues. The remaining insignificant operating segments are combined and the segment information discussed in the next section is disclosed in an “all other” segment category. If a company has only one operating segment, it does not have disaggregated information to report, but it still must disclose the general information and company-wide information discussed in the next section.

Information Reported

The disclosure requirements of *FASB Statement No. 131* are quite detailed. We summarize them as follows:

1. *General Information*. A company must (a) identify how it is organized (e.g., by product lines or geographic areas) and what factors were used to identify its operating segments, and (b) describe the types of products and services from which each reportable segment earns its revenues.
2. *Information about Profit (or Loss)*. A company must report its profit (or loss) for each reportable segment. It must also disclose certain amounts used to compute each segment’s profit (or loss). These amounts are the segment’s (a) revenues (separated

3 Describe the disclosures in a segment report.



6. If the combined losses of all operating segments that reported a loss exceed the combined profits as calculated earlier, the combined loss amount is used for this 10% test.

- into sales to external customers and intersegment sales), (b) interest revenue and interest expense, and (c) depreciation, depletion, and amortization expense.⁷
3. *Information about Assets.* A company must report the total assets of each reportable segment. For these assets, a company also must disclose the total capital expenditures for long-lived assets of each reportable segment.
 4. *Reconciliations.* A company must provide reconciliations of (a) the total of the reportable segments' revenues to the company's total revenues, (b) the total of the reportable segments' profit (or loss) to the company's pretax income from continuing operations, and (c) the total of the reportable segments' assets to the company's total assets. The revenues, profit (or loss), and segment assets of the "all other" segment category must be included in these reconciliations.
 5. *Company-Wide Disclosures.* A company must disclose (a) its revenue from external customers for each product and service, and (b) information about geographic areas including (1) revenues from external customers in the United States and in individual foreign countries, and (2) total long-lived assets located in the United States and in all foreign countries. If a company's revenues from a single external customer are 10% or more of the company's total revenues, then the company must disclose this fact and identify the segment(s) reporting the revenues.⁸

A company is not required to follow a specific format in making the preceding disclosures. The FASB encourages a company to use a format that provides the information in the most understandable manner for its specific circumstances.



LINK TO ETHICAL DILEMMA

After preparing the segment disclosures required for your company (a large, multinational corporation), you have been confronted by the CEO about the classifications used. Her major concern is that the extremely profitable operations in the Middle East are reported separately from the significantly less profitable European operations. Given the political climate in the Middle East, the CEO is concerned that many investors may get the mistaken impression that the company is exploiting the political and economic situation that exists. Also, the CEO argues that, from a managerial viewpoint, since the Middle Eastern operations are headquartered and managed from London, the European and Middle Eastern operations should be considered one operating segment. She instructs you to combine the two segments and revise the disclosures. What is your response to this request?

Typically, a company will include its segment report and the related narrative discussion in the notes to the financial statements in its annual report. What a company includes in this segment report depends on the approach the company uses to evaluate

7. These are the amounts for the most common items included in a company's pretax income from continuing operations. If an operating segment is evaluated using a more complex "income" measure (or on an after-tax basis), then the company must also disclose any unusual items, equity method income, other significant noncash items, and extraordinary items (and income tax expense or benefit) for each reportable segment.

8. *FASB Statement No. 131, op. cit.*, par. 18–39.

its segment managers. For instance, a company may invest excess funds and borrow funds at the “corporate level” so that any interest revenue and interest expense are not attributable to segment activities. These items, frequently called “corporate interest revenue” and “corporate interest expense,” are not assigned to each segment. Other types of corporate revenues, corporate expenses, and corporate assets related to the company’s headquarters also are not assigned to each segment.

Thus, a company frequently prepares a worksheet (based on information from internal reports) that assigns its total sales revenues, cost of goods sold, operating expenses, and assets to each operating segment. Based on these assignments, the company performs the revenue, profit, and asset tests to determine the *reportable segments*. The required financial information of the reportable segments (and the “all other” segments) then is reported separately in the company’s segment report. Because companies vary in their management approaches, it is not practical to illustrate all possible types of segment reports. We do, however, illustrate the way one hypothetical company (the Teal Company) discloses its disaggregated financial information in its annual report. The Coca-Cola Company has more extensive disclosures, which we show in Appendix A of this book.

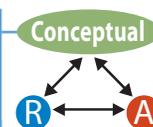
For example, assume that on its 2007 income statement, the Teal Company reports sales of \$3,800, cost of goods sold of \$2,470, and operating expenses of \$620, so that its pretax operating profit is \$710 ($\$3,800 - \$2,470 - \620). From this pretax operating profit, the company deducts interest expense of \$80 to report pretax income from continuing operations of \$630. The company also reports total assets of \$19,000 on its December 31, 2007 balance sheet. The company’s chief operating officer uses a segment’s pretax operating profit to evaluate the segment manager; the company makes no inter-segment sales, and interest expense is considered to be incurred at the corporate level. After preparing a worksheet to assign its segment revenues (sales), operating profits (sales minus cost of goods sold and operating expenses), and assets for segment reporting, Teal determines that it has three reportable segments (A, B, and C) and several insignificant operating segments. Teal also determines that it has \$100 of general corporate expenses and \$3,000 of general corporate assets.

Example 6-1 shows the schedule and narrative discussion that Teal Company includes in its annual report. Note that the revenues and profits of the segments are reconciled to the appropriate totals on the income statement. The segment revenues are reconciled to total sales. The segment profits are reconciled to the pretax income from continuing operations by deducting the general corporate expenses and corporate interest expense. Similarly, the segment assets are reconciled to the total corporate assets.

Conceptual Evaluation

FASB Statement No. 131 replaced *FASB Statement No. 14*, which was issued more than 30 years ago. *FASB Statement No. 14* focused on limited reporting of disaggregated information about a company’s industry and geographic segments. During the 30-year period, external users found that they needed *more* and *better* disclosures. They argued that the disclosure of disaggregated information, along the lines that a company uses in its internal management decisions, is vital for investment and credit decision making. They felt that it is important for analysis and interpretation to be able to see the information “through the eyes of management.” Furthermore, they argued that quarterly disaggregated information would be helpful in their decisions.

The FASB agreed and issued *FASB Statement No. 131*. It stated that the disaggregated reporting requirements are intended to provide information about the different types of company operations and the different economic environments in which it operates to help users (1) better understand the company’s current and past performance, (2) better assess its prospects for future net cash flows, and (3) make more informed judgments about the company as a whole. It also requires the disclosure of certain segment information in a company’s interim reports (discussed in the next section). In other words, the



EXAMPLE 6-1 Segment Reporting**TEAL COMPANY****Operating Segment Financial Results
For Year Ended December 31, 2007**

	Reportable Operating Segments			All Other Segments	Total Results
	A	B	C		
Segment revenues (sales)	\$ 300	\$2,530	\$ 370	\$ 600	\$ 3,800
Segment profit (pretax)	\$ 70	\$ 495	\$ 105	\$ 140	\$ 810
General corporate expenses					(100)
Corporate interest expense					(80)
Pretax income from continuing operations					\$ 630
Segment assets at December 31, 2007	\$1,800	\$9,400	\$2,000	\$2,800	\$16,000
General corporate assets					3,000
Total assets at December 31, 2007					\$19,000

NOTES: The company is organized into three major segments, A, B, and C (describe factors identifying segments). Operations in Segment A involve production and sales of (describe types of products and services). Operations in Segment B involve production and sales of (describe types of products and services). Operations in Segment C involve production and sales of (describe types of products and services). Total revenue by segment includes sales to external customers. The company makes no intersegment sales.

Segment profit is total revenue less operating expenses. In computing segment profit, none of the following items have been deducted: general corporate expenses, corporate interest expense, or income taxes.

Depreciation for Segments A, B, and C was \$20, \$300, and \$40, respectively. Capital expenditures for the three segments were \$100, \$400, and \$200, respectively. Segment assets are those assets that are used in the company's operations in each segment. General corporate assets are principally cash, temporary investments, and corporate headquarters.

The company only makes sales in the U.S. Contracts with a U.S. government agency account for \$600 of the sales to external customers of Segment B.

FASB expects that this disaggregation will provide more *relevant* information that will improve the *feedback value*, *predictive value*, and *timeliness* of a company's financial reports.

The FASB adopted the "management approach" to disaggregated reporting to provide a viewpoint of the way a company manages its operations. Furthermore, it felt that since segment managers have a vested interest in the "quality" of the information used to evaluate them, the information is more likely to be accurate. In other words, the FASB expects the current disclosures to be more *reliable* by having more *representational faithfulness* and a higher degree of *verifiability*.

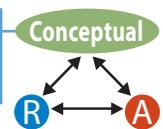
There are at least three *comparability* issues, however. First, not all companies are organized in the same way. Therefore, one company's operating segment information may not be comparable to another's. Second, companies vary as to what price a segment is charged when it "purchases" goods from another segment (this is called "transfer pricing"). So one company's intersegment sales revenue may be based on market prices, while other companies may use "full costing" or "variable costing" transfer pricing methods. Finally, if a company allocates expenses in determining each segment's profit, this must be done on a "reasonable" basis. But what is reasonable to one company may not be reasonable to another. While these issues may result in reduced comparability across companies, there is increased *consistency* for each company. On balance, the FASB feels that the current requirements for disaggregated disclosures improve the financial reporting for external users by enhancing the *decision usefulness* of the information.

INTERIM FINANCIAL REPORTS

External users often want more frequent accounting information than that provided in the annual report. **Interim financial statements are reports for periods of less than a year.** Their purpose is to improve the *timeliness* of accounting information. These *interim reports* are issued by all publicly held companies on a quarterly basis (hence the term *quarterly financial statements*). One issue involving interim reports is the difficulty inherent in determining meaningful operating results for intervals of less than a year. Revenues of some businesses are seasonal and fluctuate widely across interim periods. Some companies incur heavy fixed costs in one interim period that benefit the operating activities in other periods. Other companies must estimate costs that will not be paid until later interim periods but that benefit the current one. Estimates also must be made of items such as inventories and income taxes if the interim reports are to be relevant and reliable.

In response to these concerns, the APB issued **APB Opinion No. 28**. This *Opinion* established the generally accepted accounting principles that apply to interim financial statements and specified the disclosures needed to present meaningful information for an interim period of less than a year. The Board was particularly concerned with reconciling two different views about interim periods. One view is that each interim period is a basic accounting period and the results of operations should be determined in the same way as if the interim period were an annual accounting period. The other view is that each interim period is an integral part of the annual accounting period. Thus, deferrals, accruals, and estimates made at the end of each interim period should consider the impact on the results of operations for the rest of the annual period. The Board concurred with the second view and concluded that **each interim period is viewed primarily as an integral part of an annual period**. Thus a company must continue to use the generally accepted accounting principles that it used in the preparation of its latest annual report. However, certain principles are modified for interim reporting purposes so that the results are more informative and articulate better with the annual report results. The FASB has issued one *Statement* (No. 131) and an *Interpretation* (No. 18) to expand and clarify various aspects of *APB Opinion No. 28*. The current generally accepted accounting principles focus primarily on the income statement items. We briefly summarize them in the following sections.

4 Explain interim reporting.



Revenues

A company must recognize revenues from products or services during an interim period in the same manner (when earned and realized) as during the annual accounting period. For example, when the percentage-of-completion method is used to recognize long-term construction contracts, revenues are recorded on the basis of the percent completed during that interim period. In cases where revenues are subject to seasonal variations, the company must disclose the seasonal nature of its activities and consider presenting supplemental information regarding revenues for previous periods.

Expenses

A company must match the expenses that are directly related to product sales or services against interim revenues in the period the revenues are recognized. These include items such as inventory costs, wages, and warranties. For inventories, a company generally must use the same inventory pricing methods (e.g., LIFO, FIFO, average) and make write-downs to market for interim reporting in the same way as it does for annual reporting, with the following exceptions:

1. A company that uses a periodic inventory system and estimated gross profit rates (or other estimation methods) to determine its cost of goods sold during interim periods must disclose the method used and any significant adjustments from reconciliation with the annual physical inventory.

2. If a company using the LIFO method has a temporary partial liquidation of its base-period inventory, but expects to replace that inventory by year-end, its cost of goods sold must include the expected cost to replace the liquidated inventory. Also, the inventory at the interim reporting date must *not* include the effect of the liquidation. Assuming rising prices, this requirement avoids the possibility of showing abnormally high interim period income due to LIFO “liquidation profits.”
3. A company must recognize a permanent loss due to an inventory market decline by using the lower of cost or market procedures in the interim period during which the decline occurred. It must recognize any recovery of such a loss in a later interim period within the same year as a gain (not to exceed the previously recognized loss) in the later period. It does not have to recognize a temporary market decline in an interim period. (We discuss the recognition of losses using lower of cost or market procedures in Chapter 9.)
4. If a company uses a standard cost accounting system, it must follow routine annual procedures for all variances. The company must disclose any significant unplanned or unanticipated purchase price or volume variances in the interim period.

Expenses that are not directly associated with product sales (or services) are matched against revenues using a variety of methods. Expenses that affect the operating activities of more than one interim period are allocated among the interim periods based on an estimate of (1) time expired, (2) benefit received, or (3) activity associated with the periods. These allocations must be consistent with those used for annual reporting purposes. For example, accrued or deferred property taxes, advertising costs, depreciation charges, and uncollectible accounts (bad debts) expense are allocated among the interim periods. Expenses that relate only to the current interim period are allocated to that period. No arbitrary allocations are allowed. For example, office utilities, rent expense, and interest costs are expensed as incurred in the interim period. Gains and losses that occur in an interim period and that would not be deferred at year-end are recognized in that interim period. For example, a gain on the sale of land or a loss on the disposal of equipment is recognized in the interim period.⁹

Income Taxes

To present fairly the results of operations, at the end of *each* interim period a company must make its best estimate of the effective income tax rate expected to apply for the *entire* year. The effective rate includes the appropriate tax rate on *annual* income from continuing operations. In determining the rate, the company does not consider the income tax related to any items (such as extraordinary items) that are reported separately net of income taxes. Consequently, each quarter the company estimates its annual income from continuing operations and, based on this annual income, estimates its annual income taxes to derive an effective annual income tax rate. It then uses the effective rate to compute the income taxes related to income from continuing operations on a year-to-date basis. The amount of income taxes for the current interim period is the difference between the income tax computed on year-to-date income from continuing operations and the related income taxes reported on previous interim reports of the accounting period.¹⁰ This procedure must be completed for each of the four interim periods; it follows the general principle of intraperiod tax allocation.

For example, assume Trull Corporation reported pretax income from continuing operations of \$20,000 at the end of the first quarter and estimated its income tax on this income to be \$5,220. (This estimate was made at the end of the first quarter, using the

9. “Interim Financial Statements,” *APB Opinion No. 28* (New York: AICPA, 1973), par. 11–15.

10. “Accounting for Income Taxes in Interim Periods,” *FASB Interpretation No. 18* (Stamford, Conn.: FASB, 1977), par. 9.

technique discussed previously.) The corporation now is preparing an interim income statement at the end of the second quarter for that quarter and the first six months. It determines that its pretax income from continuing operations for the second quarter is \$26,000 and estimates it will earn \$25,000 and \$29,000 in each of the next two quarters, respectively. The corporate income tax rates are 15% on the first \$20,000 of earnings and 30% on earnings in excess of \$20,000. As we show in Example 6-2, based on an estimated effective income tax rate of 27%, Trull Corporation lists income tax expense of \$12,420 for the first six months and \$7,200 for the second quarter of operations.

EXAMPLE 6-2 Computation of Interim Income Taxes

1. Estimated Annual Income

First quarter	\$ 20,000	actual income
Second quarter	26,000	actual income
Third quarter	25,000	estimated income
Fourth quarter	<u>29,000</u>	estimated income
	<u>\$100,000</u>	estimated annual income

2. Estimated Effective Income Tax Rate

$$\begin{aligned}
 15\% \times \$20,000 &= \$ 3,000 \\
 30\% \times (\$100,000 - \$20,000) &= \underline{24,000} \\
 \text{Estimated total tax} &= \$27,000 \\
 27\% \text{ Effective income tax rate} &= \frac{\$27,000 \text{ Estimated income tax}}{\$100,000 \text{ Estimated income}}
 \end{aligned}$$

3. Estimated Income Tax for First Six Months

$$\$46,000 \times 27\% = \underline{\$12,420} \text{ estimated income tax on first six months' income}$$

4. Estimated Income Tax for Second Quarter

$$\begin{aligned}
 \$12,420 & \text{ estimated income tax on first six months of income} \\
 \underline{(5,220)} & \text{ estimated income tax on first-quarter income} \\
 \underline{\$ 7,200} & \text{ estimated income tax on second-quarter income}
 \end{aligned}$$

Extraordinary Items and Discontinued Operations

Material extraordinary items and results of discontinued operations are reported (net of income taxes) in the usual manner in the interim period during which the events occurred. None of these items is prorated over the entire annual accounting period. Materiality, however, is determined on the basis of a relationship of the item to the estimated income for the entire *year* and not to the interim period results.

Earnings per Share

Earnings per share is computed for each interim period presented. In its simplest form, earnings per share is computed by dividing the net income by the average number of common shares outstanding for the accounting "period." The quarter (or year-to-date for longer periods) is considered the accounting period. The resulting earnings per share is reported on the face of the interim income statement. A breakdown of earnings per share related to income from continuing operations, results of discontinued operations, and extraordinary items is also disclosed.

Companies must be careful in disclosing comparative interim earnings per share because of differences arising from the short time periods. Shares issued in the second quarter result in a different number of outstanding shares than in the first quarter, making it difficult for a user to predict an annual earnings per share. Similarly, an extraordinary loss occurring in the fourth quarter affects earnings per share for that quarter and the year but does not affect the earnings per share listed in the first three quarters.

Preparation and Disclosure of Summarized Interim Financial Data

5 Prepare an interim report.

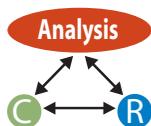
The accounting procedures a company uses to prepare its interim reports are similar to those for annual reports. Typically, a trial balance of the year-to-date account balances is prepared. The trial balance is entered on a worksheet, spreadsheet, or other working paper. Year-to-date adjusting entries are recorded on the working paper, after which the year-to-date financial statements are prepared. However, the interim accounting procedures differ in several respects from those completed at year-end.

First, for a company using a periodic inventory system, the ending inventory for the interim reports is usually based on an estimation technique rather than on a physical inventory. Thus, the gross profit method, retail inventory method, or some other estimation technique is used to estimate the ending interim inventory to be recorded on the working paper and reported in the financial statements. Second, the adjusting entries required at the end of the interim period to bring the accounts up to date usually are recorded only on the working paper and are not entered into the accounts. When this approach is used, only at the end of the year are the annual adjusting entries journalized and posted to the accounts.

Third, the accounts are not closed at the end of each interim period. Consequently, in an interim period subsequent to the first period, a company must be careful not to include amounts applicable to previous interim periods in the revenue and expense accounts. To avoid this problem, as we mentioned previously, a company typically prepares the interim income statement on a year-to-date basis and then eliminates the income statement results from any previous interim periods. For example, at the end of six months, a company would prepare a half-year income statement and then “back out” (subtract) the first-quarter income statement results to determine the second-quarter income statement. Finally, interim reports typically are not audited (except for SEC reports) because of the time and cost involved. However, auditing procedures have been developed for cases where an accountant is engaged to review a company’s interim financial information.

While the APB recognized the advantages to users of more timely information in interim reports, it also felt that this advantage may be partially offset by the lesser amount of detail in the interim reports. Thus, it provided guidelines regarding *minimum* disclosure. When publicly held companies report interim summaries of financial information, the following data must be reported at a minimum: (1) sales or gross revenues, income taxes, extraordinary items (net of tax), and net income; (2) earnings per share for each period presented; (3) seasonal revenues, costs, and expenses; (4) significant changes in estimates of income taxes; (5) results of discontinued operations and material unusual or infrequent items; (6) contingent items; (7) changes in accounting principles¹¹ or estimates; and (8) significant changes in financial position (i.e., cash flows).

When a company presents the preceding information on a quarterly basis, it also provides current year-to-date information, along with comparable data from the previous year. Companies are encouraged to provide condensed balance sheet and cash flow data for the interim periods to assist external users in their analyses of *financial flexibility* and *liquidity*. When this information is not presented, a company must report any significant changes since the last reporting date in liquid assets, working capital, long-term liabilities,



11. APB Opinion No. 28 established certain guidelines for reporting accounting changes in interim reports. These guidelines are not discussed in this chapter. As a result of difficulties in interpretation, FASB Statement of Financial Accounting Standards No. 154, “Accounting Changes and Error Corrections” (Norwalk, Conn.: FASB, 2005), clarified the reporting of such changes, and is discussed in Chapter 23.

and stockholders' equity. A company also must disclose selected information about each of its reportable operating segments. This information includes items such as segment revenues from external customers, intersegment revenues, segment profit or loss, and segment assets.¹² The SEC requires more extensive interim disclosures, as we discuss later in the chapter. Although interim financial statements are too lengthy to illustrate here, The Coca-Cola Company includes quarterly data at the end of the notes to its financial statements, as we show in Appendix A to this book.



SECURE YOUR KNOWLEDGE 6-2

- A company reports disaggregated financial information for any significant operating segments to help external users better understand the way in which it manages its operations.
- While no specific format is specified, extensive disclosures are required that include information on how a company is organized, the types of products and services of each reportable segment, the income and assets of each reportable segment, and how segment data reconciles to company-wide data.
- To provide more timely information, a company prepares interim financial reports that are viewed as an integral part of its annual reporting period.
- The preparation of interim financial reports requires the modification of certain generally accepted accounting principles to provide more meaningful reports that articulate with the annual report.

SEC REPORTS

The Securities and Exchange Commission (SEC) was created to administer various securities acts under powers provided by Congress in the Securities Act of 1933 and the Securities Exchange Act of 1934. The intent of Congress was to regulate the disclosure of all significant financial information provided by companies issuing publicly-traded securities (e.g., stocks and bonds). The SEC has the legal authority to prescribe accounting principles and reporting practices for these regulated (publicly-held) companies.

The SEC is a large organization with headquarters in Washington, D.C. Among the administrative offices, the **Office of the Chief Accountant** is important to accountants because it is responsible for providing the SEC with advice concerning accounting and auditing. The *Chief Accountant* helps to establish administrative policies regarding accounting matters. This office is directly responsible for *Regulation S-X* (which establishes the form and content of financial statements filed with the SEC), and is primarily responsible for the *Financial Reporting Releases* (which prescribe accounting principles for regulated companies). Among the divisions, the **Division of Corporation Finance** is also important to accountants. This division is responsible for assisting in the establishment of reporting standards (except those directly related to financial statements, which are the responsibility of the Chief Accountant) and the requirements for adherence to these standards by regulated companies. The division is also responsible for reviewing the financial reports submitted to the SEC by regulated companies. Since all these reports generally must be certified by a certified public accountant, an understanding of its activities is useful to accountants responsible for filing them.¹³

12. *FASB Statement No. 131, op. cit.*, par. 33.

13. For a more extensive discussion of the history and administrative responsibilities of the various segments of the SEC, see K. F. Skousen, S.M. Glover, and D.F. Prawitt, *An Introduction to Corporate Governance and the SEC* (Mason, Ohio: South-Western Publishing Company, 2005).

Numerous forms are required to be filed with the SEC by regulated companies. Two forms that are important to accountants are:

- *Form 10-K*. An annual report.
- *Form 10-Q*. A quarterly report of operations.



Form 10-K

Form 10-K is used to report a company's annual financial information to the SEC and is required to be filed within 60 days of a company's fiscal year-end. The SEC separates its required financial information in Form 10-K into two types: (1) information that must be reported *both* in annual reports filed with the SEC and annual reports issued to stockholders, and (2) information required to be filed only with the SEC.

Information of the first type includes items such as the financial statements, notes, management's discussion and analysis (MD&A), and market information on the company's common stock. This information can be included in Form 10-K by *reference* to the company's annual report issued to stockholders. Note, however, that all the information *must* be included in the annual report. Thus, for instance, many companies include an MD&A as well as three years of comparative financial statements in their stockholders' annual reports. Some regulated companies (e.g., The Coca-Cola Company) no longer publish a separate stockholders' annual report but only publish their Form 10-K. The second type of information (required to be filed only with the SEC) is considered to be important primarily to a limited and sophisticated group of users (e.g., security analysts). This type includes items such as directors and officers, executive compensation, legal proceedings, and voting matters.

Form 10-Q

Form 10-Q is used to report a company's quarterly financial information to the SEC and is required to be filed within 35 days of the end of each of the company's first three fiscal quarters. It contains similar disclosures to that of Form 10-K, but includes only quarterly and year-to-date information. The accounting principles established in *APB Opinion No. 28*, "Interim Financial Reporting," discussed earlier in the chapter, are used to prepare the Form 10-Q disclosures, so that this financial information is very similar to that provided in a company's quarterly report to stockholders. However, it may be more extensive because the SEC *requires* the presentation of comparative interim financial statements.

XBRL Supplemental Information

All companies are required to file Form 10-K and Form 10-Q electronically according to the EDGAR requirements. In addition, the SEC allows companies to voluntarily submit some or all of this electronically-transmitted financial information in XBRL (eXtensible Business Reporting Language). A financial report prepared using the XBRL format includes an identifying "tag" for each individual item (e.g., sales revenue, cost of goods sold) in the report. This allows computer software to recognize and extract items of information in the report in "real time" for various analytical purposes. For instance, the software can provide external users with virtually instantaneous comparisons of a company's operating results for the current year with its results from previous years or with the results of other companies. Although XBRL reporting is in its early stages, it is likely that more financial information will be transmitted to external users under this format. For more details on XBRL see <http://www.xbrl.org>.



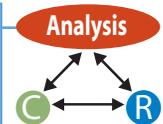
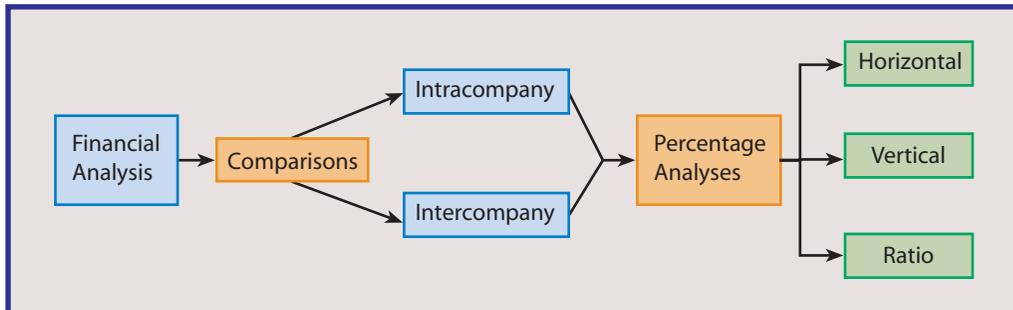
LINK TO INTERNATIONAL DIFFERENCES

International accounting standards differ somewhat from U.S. accounting standards for both segment reporting and interim reporting. Segment reporting is required under international accounting standards, but reportable segments are identified differently than under U.S. standards. Under international standards, segments are reported as either business segments or geographic segments. A business segment is a component of a company that provides goods or services that are different from other business segments as to risks and returns. A geographic segment is a component of a company that provides goods or services within a particular economic environment that are different from other geographic segments as to risks and returns. International and U.S. standards require a company to make similar segment disclosures (e.g., segment profit or loss, revenues, assets), but there are some differences in measurement and reporting requirements. For instance, a company (1) measures its segment profit (or loss) under international standards in the same way as it reports its consolidated income (as opposed to the management approach in the United States) and (2) includes in segment revenues and segment assets any reasonably allocated items (as opposed to the management approach). International standards also require a company to disclose each segment's liabilities and encourages segment cash flow disclosures.

International accounting standards provide guidance for what to include in an interim report, but do not specify which companies must publish them or how frequently. Public companies, however, are encouraged to provide at least half-year reports. If a company issues an interim report, under international standards it is required to include a condensed balance sheet, income statement, cash flow statement, statement of changes in equity, and selected explanatory notes. However, international standards differ from U.S. standards in that they do not allow (1) the allocation of expenses between interim periods, (2) the deferral of manufacturing variances that are expected to be offset in a later interim period, or (3) the deferral of a temporary market decline in inventory that is expected to be recovered in a later interim period.

APPENDIX: FINANCIAL ANALYSIS COMPARISONS

This Appendix deals with various tools of financial analysis. The following diagram depicts financial analysis and its related tools that we discuss in later sections.



Before we discuss preparing these financial analyses, it is helpful to know how this information is used. The decision process of external users may be summarized as follows:

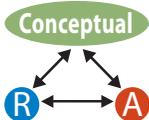
1. External users examine the current financial reports for information important to them.

2. They look for criteria that will assist them in analyzing the reports and making decisions; usually, although not exclusively, they make comparisons with a particular company's past results as well as with similar companies within the same or related industries.
3. They make their decision.
4. They evaluate their decision based on feedback.

INTRACOMPANY COMPARISONS

6 Understand intracompany and intercompany comparisons.

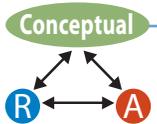
One method of evaluating a company's current financial performance and condition is to compare them with the company's past results. This is called **intracompany comparison**. An important issue in this type of comparison is the evidence of **trends**—indications that a company's performance is stable, improving, or deteriorating, not only in the short run but also in the longer run. Most companies now present at least 2 years of comparable data in their financial statements. Many also include 5-, 10-, or 15-year summaries of key financial data.



A critical point to remember when preparing financial analysis information for use in intracompany comparisons is the need for **consistency** over time. Whether a company prepares operating segment information, interim data, percentage analyses, ratios, or SEC reports, each year's information should be consistently presented so that valid and reliable comparisons may be made.

INTERCOMPANY COMPARISONS

A second method of evaluation is to compare a company's performance with that of competitors, with the industry as a whole, or with the results in related industries. This is known as **intercompany comparison** and may be made for a single period or for several past periods. A competitor's financial information may be obtained from its respective financial statements. Information on the performance of the industry as a whole or of related industries may be based on compilations of financial information by such financial analysis companies as Moody's Investors Service, Standard and Poor's, Dun and Bradstreet, and Robert Morris and Associates. These companies not only provide information from annual reports but also publish periodic updates and supplements. Other organizations and trade associations supply similar information on a more selective basis. Much of this information is available on the Internet.



A user preparing financial analysis information for an intercompany comparison is concerned not only with consistency over time, but also with comparability of data across companies. A preparer of a company's financial information cannot control the consistency of data across other companies. Nevertheless, the preparation of this data should take into consideration such factors as the use of comparable numbers in the numerator and denominator of financial ratios, the use of common industry classifications in the development of operating segment results, and the impact of different generally acceptable accounting practices (for example, LIFO versus FIFO for inventory costing or accelerated versus straight-line depreciation) on the results. When preparing financial analysis data, an accountant should be aware that this information may be used in both intracompany and intercompany comparisons.

PERCENTAGE ANALYSES

7 Prepare horizontal and vertical percentage analyses.

The comparison of a company's operating results and financial position across several periods or with other companies may be enhanced by converting the monetary amounts in the financial statements to percentage relationships. The three types of analyses that use percentage relationships are called horizontal analysis, vertical analysis, and ratio analysis. We discuss the first two in this section and discuss ratio analysis in the following section.

Horizontal Analysis

In horizontal analysis, a company shows the changes in its operating results and financial position *over time* in percentages as well as in dollars. This method is usually used with the income statement. Horizontal analysis sometimes is used for balance sheet comparisons. It is used less frequently in the analysis of the statement of cash flows because many items do not recur consistently on this statement.

When only two years of comparative data are disclosed in percentages, the earlier year is used as the base year and the amount of change in each item is shown as a percentage of that item's base-year amount. When data are shown for more than two years, two alternative approaches may be used. In the first approach, the preceding year is used as the base year for each later year, and the percentage change from year to year is shown. Column (1) of Example 6-3 shows this "year-to-year" approach for the Cooper Company. Although this approach identifies and highlights year-to-year changes, a user cannot easily analyze the relative changes over an extended period. Because different years are used as bases, it is not possible to add the changes from year to year to determine the total cumulative change. For this type of analysis, a second approach may be used. Here, the *initial* year is used as the base year, and the cumulative results from later years are compared with the initial year to determine the cumulative percentage changes. Column (2) of Example 6-3 shows this "base-year-to-date" approach for the Cooper Company. With this approach, if a weak initial year is selected, the cumulative percentage changes appear stronger than may be warranted.

Whenever horizontal analysis is used, a company must be careful in computing and interpreting percentage changes. If a base figure is zero or negative, although an *amount* of change may be shown, *no percentage* change may be validly expressed. Also, in cases where changes are shown as percentages, no vertical addition or subtraction of the percentages (as we discuss in the next section) can be made because the percentage changes result from the use of different bases. Finally, for items with small base amounts, a relatively small dollar change may result in a very high percentage change, thus potentially making the item more significant than may be warranted.



Vertical Analysis

In vertical analysis, a company shows the monetary relationships between items on its financial statements for a particular *period* in percentages as well as in dollars. When vertical analysis is used for comparisons of financial statements from several periods, trends or changes in the relationships between items are more easily identified. Financial statements shown only in percentages are referred to as **common-size statements**.

Vertical analysis may be used with the income statement, retained earnings statement, balance sheet, or the statement of cash flows. In the case of the income statement, net sales usually are expressed as 100% and all other components are expressed accordingly. On the balance sheet, total assets represent 100%; on the retained earnings statement, beginning retained earnings is 100%; and for the statement of cash flows, the increase in cash is usually expressed as 100%. Examples 6-4 and 6-5 show vertical analyses for the Cooper Company.

Both vertical and horizontal analysis may be used with interim reports and reports of the results of operating segments. Vertical and horizontal analyses also are used with ratio analysis.

RATIO ANALYSIS

Another form of percentage analysis involves the use of ratios. Ratios involve the division of one or more items on the financial statements by another related item or items. They are frequently used to evaluate the financial aspects (i.e., return, risk, financial flexibility, liquidity, and operating capability) of a company. Many ratios have become standardized. They are



EXAMPLE 6-3 Horizontal Analyses**COOPER COMPANY****Comparative Income Statements**

	For Years Ended December 31,			(1) Year-to-Year Increase (Decrease)				(2) Base-Year-to-Date Increase (Decrease)	
	2008	2007	2006	2007 to 2008		2006 to 2007		2006 to 2008	
	Amount	Amount	Amount	Amount	Percent	Amount	Percent	Amount	Percent
Sales	\$138,000	\$130,000	\$109,500	\$ 8,000	6.2	\$20,500	18.7	\$28,500	26.0
Sales returns	(8,000)	(10,000)	(9,500)	(2,000)	(20.0)	500	5.3	(1,500)	(15.8)
Sales (net)	\$130,000	\$120,000	\$100,000	\$10,000	8.3	\$20,000	20.0	\$30,000	30.0
Cost of goods sold	(74,100)	(67,200)	(58,000)	6,900	10.3	9,200	15.9	16,100	27.8
Gross profit	\$ 55,900	\$ 52,800	\$ 42,000	\$ 3,100	5.9	\$10,800	25.7	\$13,900	33.1
Selling expenses	(14,900)	(14,300)	(10,800)	600	4.2	3,500	32.4	4,100	38.0
General expenses	(22,300)	(22,240)	(17,350)	60	0.3	4,890	28.2	4,950	28.5
Interest expense	(3,000)	(2,400)	(2,400)	600	25.0	0	0.0	600	25.0
Total expenses	\$ (40,200)	\$ (38,940)	\$ (30,550)	\$ 1,260	3.2	\$ 8,390	27.5	\$ 9,650	31.6
Pretax continuing income	\$ 15,700	\$ 13,860	\$ 11,450	\$ 1,840	13.3	\$ 2,410	21.0	\$ 4,250	37.1
Incometax expense	(4,700)	(4,160)	(3,450)	540	13.0	710	20.6	1,250	36.2
Net income	\$ 11,000	\$ 9,700	\$ 8,000	\$ 1,300	13.4	\$ 1,700	21.3	\$ 3,000	37.5
Number of common shares	5,400	4,800	4,000	600	12.5	800	20.0	1,400	35.0
Earnings per share*	\$1.81	\$1.77	\$1.70	\$0.4	2.3	\$0.7	4.1	\$1.1	6.5

*Earnings per Share = $\frac{\text{Net Income} - \text{Preferred Dividends } (\$1,200)}{\text{Average Common Shares Outstanding}}$

EXAMPLE 6-4 Vertical Analysis (Income Statement)**COOPER COMPANY****Comparative Income Statements
For Years Ended December 31, 2007 and 2008**

	2008		2007	
	Amount	Percent	Amount	Percent
Sales	\$138,000	106.2	\$130,000	108.3
Sales returns	(8,000)	(6.2)	(10,000)	(8.3)
Sales, net (70% on credit)	\$130,000	100.0	\$120,000	100.0
Cost of goods sold	(74,100)	(57.0)	(67,200)	(56.0)
Gross profit	\$ 55,900	43.0	\$ 52,800	44.0
Selling expenses	(14,900)	(11.5)	(14,300)	(11.9)
General expenses	(22,300)	(17.1)*	(22,240)	(18.5)
Interest expense	(3,000)	(2.3)	(2,400)	(2.0)
Total expenses	\$ (40,200)	(30.9)	\$ (38,940)	(32.4)
Pretax continuing income	\$ 15,700	12.1	\$ 13,860	11.6
Income tax expense	(4,700)	(3.6)	(4,160)	(3.5)
Net income	\$ 11,000	8.5	\$ 9,700	8.1
Number of common shares	5,400		4,800	
Earnings per share	\$1.81		\$1.77	

**Comparative Retained Earnings Statements
For Years Ended December 31, 2007 and 2008**

	2008		2007	
	Amount	Percent	Amount	Percent
Beginning retained earnings	\$ 32,000	100.0	\$ 28,300	100.0
Net income	11,000	34.4	9,700	34.3
	\$ 43,000	134.4	\$ 38,000	134.3
Preferred dividends, \$8/share	(1,200)	(3.7)	(1,200)	(4.2)
Common dividends, \$1/share	(5,400)	(16.9)	(4,800)	(17.0)
Ending retained earnings	\$ 36,400	113.8	\$ 32,000	113.1

*Rounded to balance.

useful indicators of financial performance and are computed routinely and published on a company and industry basis by financial analysis companies. These ratios become “benchmarks” against which to compare a company’s results to evaluate its effectiveness. The ratios are used by different external users in intracompany and intercompany comparisons for many economic decisions. Other ratios are developed by individual users or user groups for their own specific needs.

There are more than 30 different ratios or variations of ratios for financial analysis. However, we focus on the primary standard ratios, some of which we briefly discussed in earlier chapters. These may be classified into six groups: (1) stockholder profitability ratios, (2) company profitability ratios, (3) liquidity ratios, (4) activity ratios, (5) stability ratios, and (6) cash flow ratios. We briefly discuss how to compute and use each ratio in the following sections. The 2008 data for the computation of these ratios is included in Examples 6-4 and 6-5 for the Cooper Company. Since we do not discuss the calculations of these ratios in the text, you should refer to these exhibits to identify the numbers used for each ratio.

8 Perform ratio analysis.

EXAMPLE 6-5 Vertical Analysis (Balance Sheet)**COOPER COMPANY****Comparative Condensed Balance Sheets
December 31, 2007 and 2008**

	2008		2007	
	Amount	Percent	Amount	Percent
Cash	\$ 3,900	3.0	\$ 4,800	4.3
Receivables (net)	7,600	5.9	8,600	7.7
Inventories	8,900	6.9	10,100	9.0
Prepaid items	1,000	.8	1,200	1.1
Total current assets	\$ 21,400	16.6	\$ 24,700	22.1
Noncurrent assets (net)	107,800	83.4	87,300	77.9
Total Assets	<u>\$129,200</u>	<u>100.0</u>	<u>\$112,000</u>	<u>100.0</u>
Accounts payable	\$ 5,000	3.9	\$ 6,600	5.9
Other current liabilities	6,200	4.8	6,400	5.7
Total current liabilities	\$ 11,200	8.7	\$ 13,000	11.6
Long-term liabilities (12%)	25,000	19.3	20,000	17.9
Total liabilities	\$ 36,200	28.0	\$ 33,000	29.5
Preferred stock, 8%, \$100 par*	\$ 15,000	11.6	\$ 15,000	13.4
Common stock, \$5 par [†]	27,000	20.9	24,000	21.4
Additional paid-in capital	14,600	11.3	8,000	7.1
Retained earnings	36,400	28.2	32,000	28.6
Total stockholders' equity	\$ 93,000	72.0	\$ 79,000	70.5
Total Liabilities and Stockholders' Equity	<u>\$129,200</u>	<u>100.0</u>	<u>\$112,000</u>	<u>100.0</u>

*The 150 shares of preferred stock are noncumulative and have a liquidation value of \$140 per share.

[†]December 31, 2008 market price is \$14.25 per share.

Stockholder Profitability Ratios

Stockholder profitability ratios are used to evaluate how effective a company has been in meeting the profit (i.e., return) objectives of its owners. Example 6-6 shows several stockholder profitability ratios, along with the calculations for the Cooper Company. We discuss each ratio in the following sections.

Earnings Per Share

Earnings per share is probably the most frequently cited ratio in a financial analysis. It is considered important enough to be a required disclosure on the face of a company's income statement. As its name indicates, it shows the amount of earnings attributable to each share of common stock held by stockholders.

Price/Earnings

Although not precisely a stockholder profitability ratio, the price/earnings ratio is used by actual and potential stockholders to evaluate the attractiveness of an investment in the stock of a company. A higher price/earnings ratio compared to other similar companies may indicate that investors perceive expansion potential for the company. Be careful, however, that the comparison is made to other "similar" companies. The price/earnings ratios for companies in "growth" industries, such as the electronics industry, are likely to be higher than for, say, companies in the automobile or steel industries. Interpretation of the

ratio also is affected by investors' perceptions of the company's quality and trend of earnings, relative risk, use of alternative accounting methods, and other factors. Earnings per share based on income from continuing operations usually is used as the denominator.

Dividend Yield

The market value of a company's stock represents the value a stockholder must forgo to continue holding the security. Stockholders are interested in their individual rates of return based on the actual dividends received as compared with the ending market price (or market price on another particular date) of the stock. The dividend yield provides this information. The dividend yield, combined with the percentage change in the market price of the stock held during the period, is the total annual return on the stockholders' investment.

EXAMPLE 6-6 Stockholder Profitability Ratios

Ratio	Formula	Calculations (2008)
1. Earnings per Share	$\frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Average Common Shares Outstanding}}$	$\frac{\$11,000 - \$1,200}{5,400} = \$1.81$
2. Price/Earnings	$\frac{\text{Market Price per Common Share}}{\text{Earnings per Share}}$	$\frac{\$14.25}{\$1.81} = 7.9 \text{ times}$
3. Dividend Yield	$\frac{\text{Dividends per Common Share}}{\text{Market Price per Common Share}}$	$\frac{\$1.00}{\$14.25} = 7.0\%$

Company Profitability Ratios

Company profitability ratios are used to evaluate how effective a company has been in meeting its overall profit (return) objectives, particularly in relation to the resources invested. Example 6-7 shows several overall company profitability ratios, along with the calculations for the Cooper Company. We discuss each ratio in the following sections.

EXAMPLE 6-7 Company Profitability Ratios

Ratio	Formula	Calculations (2008)
1. Profit Margin	$\frac{\text{Net Income}}{\text{Net Sales}}$	$\frac{\$11,000}{\$130,000} = 8.5\%$
2. Return on Total Assets	$\frac{\text{Net Income} + \text{Interest Expense (net of tax)}}{\text{Average Total Assets}}$	$\frac{\$11,000 + (\$3,000 \times 0.7)}{\frac{\$129,200 + \$112,000}{2}} = 10.9\%$
3. Return on Stockholders' Equity	$\frac{\text{Net Income}}{\text{Average Stockholders' Equity}}$	$\frac{\$11,000}{\frac{\$93,000 + \$79,000}{2}} = 12.8\%$

Profit Margin

The relationship of net income to net sales commonly is used to evaluate a company's efficiency in controlling costs and expenses in relation to sales. That is, the lower a company's expenses relative to sales, the higher the sales dollars remaining for other activities.

If a company has nonrecurring items of income, income from continuing operations typically is used as the numerator. The reporting of segment information permits a variation of this ratio to be computed for the major operating segments of a company. For each reportable segment, the profit margin *before* income taxes can be computed by dividing the segment's profit by its revenues. A weakness of the ratio is that it does not consider the investment (the total assets or stockholders' equity) necessary to generate the sales and income. A "return on investment" ratio (either total assets or stockholders' equity) overcomes this weakness.

Return on Total Assets

The amount of net income earned in relation to total assets indicates how efficiently a company uses its economic resources. When a comparison is made of the return on total assets of one company to the return of another company, the age of the assets of each company should be considered. That is, the return on a company's assets will get higher as the assets become older because the denominator will decrease each year due to the increase in accumulated depreciation. Also, since prices tend to increase due to inflation, a company that uses recently purchased assets will tend to show a relatively lower return on these assets. Typically, extraordinary items and results of discontinued operations are excluded from the numerator because they are the result of infrequent events not directly related to a company's ongoing operations. Interest expense (after income taxes)¹⁴ is added back to net income because it is a financial cost paid to creditors to acquire the assets as opposed to a cost of generating sales. Since net income is earned over the entire period, the *average* total assets (beginning plus ending assets divided by two) for the period are used as the denominator. Reporting the results of segments permits the computation of a variation of this ratio for the major operating segments of a company. For each reportable segment, the *pretax* return on the segment's assets can be computed by dividing the segment's profit by its total assets.

Return on Stockholders' Equity

Net income may be divided by stockholders' equity to show the residual return on the owners' equity. When this return is higher than the return on total assets, the company has favorable financial leverage (that is, it is trading on the equity, which we discuss later). A weakness of the return on stockholders' equity ratio (as well as the return on total assets ratio), however, is that it does not consider the current value of the capital invested, since financial statements are based primarily on historical cost. Extraordinary items and other nonrecurring items usually are excluded from the numerator, and *average* stockholders' equity typically is used for the denominator. Some companies deduct preferred dividends from net income and use only common stockholders' equity in this ratio. They argue that preferred stock is more similar to long-term liabilities than it is to common stock.

Liquidity Ratios

Liquidity ratios are used to evaluate a company's ability to meet its currently maturing financial obligations. These ratios generally involve all or most of the components of a company's working capital, its current assets less its current liabilities. Current assets include cash, temporary investments, receivables, inventories, and prepaid items. Current liabilities include items such as accounts payable from the normal acquisition of goods

14. After-tax interest expense is usually computed by multiplying the pretax interest expense by 1 minus the effective income tax rate. In the case of the Cooper Company, the effective tax rate approximates 30% ($\$4,700 \div \$15,700$), so that the \$3,000 pretax interest expense is multiplied by 70% ($1 - 0.30$) to determine the after-tax results.

or services; accruals for wages, taxes, and interest payable; short-term notes payable; advance collections of unearned revenues; and the currently maturing portion of long-term debt. Example 6-8 shows the common liquidity ratios, along with the calculations for the Cooper Company. We discuss each ratio in the following sections.

EXAMPLE 6-8 Liquidity Ratios

Ratio	Formula	Calculations (2008)
1. Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{\$21,400}{\$11,200} = 1.91 \text{ times}$
2. Acid-Test Ratio	$\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	$\frac{\$11,500}{\$11,200} = 1.03 \text{ times}$

Current Ratio

The current ratio probably is the most commonly used ratio to evaluate a company's short-run liquidity. Sometimes it is referred to as the *working capital ratio*. It is considered to be a better indicator of a company's current debt-paying ability than simply working capital. This is because working capital shows only the absolute difference between a company's current assets and its current liabilities. By computing the current ratio, the *relative* relationship between the current assets and current liabilities is known, so that comparisons of different-sized companies can be made. In the past, as a "rule of thumb," a 2.0 current ratio was considered satisfactory. Today, however, more attention is given to (1) industry practices, (2) the length of a company's operating cycle, and (3) the mix of the current assets. Too *high* a current ratio relative to similar companies within the same industry may indicate inefficient management of current assets. The shorter a company's operating cycle, the less likely it is to need much working capital, or as high a current ratio, to operate efficiently. A company's operating cycle is evaluated through the use of activity ratios, which we discuss in the next section. The proportion of different items that make up the total current assets is referred to as the "mix" of the current assets. This mix has an effect on how quickly the current assets can be converted into cash. As an extreme, a high proportion of prepaid items in current assets may indicate a weak liquidity position, since prepaid assets are consumed within the operating cycle rather than converted back into cash. The mix of a company's current assets and the impact on its liquidity are considered in the acid-test ratio.

Acid-Test Ratio

The acid-test or *quick* ratio is a more severe test of a company's short-term debt-paying abilities. In this ratio, only the current assets that may be easily converted into cash are used in the calculation. These items, referred to as **quick assets**, generally consist of cash, temporary investments, accounts receivable, and short-term notes receivable. Inventories are excluded because their salability is uncertain and they frequently are sold on credit; thus they may not be quickly converted into cash. Prepaid items are excluded because they are not convertible into cash. The acid-test ratio highlights potential liquidity problems because of an inadequate mix of current assets. For instance, the use of this ratio usually reveals the lower liquidity of a company having a significant amount of inventories that would not be shown in the current ratio. However, be careful to consider which assets to include. Even though inventories usually are excluded from the acid-test ratio, sometimes these are, in fact, more liquid than certain receivables. A quick ratio of 1.0 used to be a general rule of thumb. Today, as with the current ratio, greater consideration is given to such factors as industry practices and the company's typical operations.

Activity Ratios

Activity ratios are used to evaluate the liquidity of certain current assets by estimating the length of various segments of a company's operating cycle. The ratios are indicators of the efficiency with which the company uses its short-term economic resources. Example 6-9 shows the three common activity ratios, along with the calculations for the Cooper Company. We discuss each ratio in the following sections.

EXAMPLE 6-9 Activity Ratios

Ratio	Formula	Calculations (2008)
1. Inventory Turnover	$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$	$\frac{\$74,100}{\frac{\$8,900 + \$10,100}{2}} = 7.8 \text{ times or } 47 \text{ days}^*$
2. Receivables Turnover	$\frac{\text{Net Credit Sales}}{\text{Average Net Receivables}}$	$\frac{\$130,000 \times 0.70}{\frac{\$7,600 + \$8,600}{2}} = 11.2 \text{ times or } 33 \text{ days}^*$
3. Payables Turnover	$\frac{\text{Cost of Goods Sold}}{\text{Average Accounts Payable}}$	$\frac{\$74,100}{\frac{\$5,000 + \$6,600}{2}} = 12.8 \text{ times or } 29 \text{ days}^*$

*365-day business year.

Inventory Turnover

A company's operating cycle is the length of time it takes to invest in inventory, make credit sales, and convert the receivables into cash. Dividing a company's cost of goods sold for the accounting period by its average inventory indicates the number of times the inventory is "turned over" or sold during that period. As a general rule, the higher the inventory turnover, (1) the more effective the company is in its operations, (2) the lesser the amount that must be tied up in inventory, and (3) the shorter the operating cycle necessary to replenish cash. A company with a higher inventory turnover is usually more efficient and is also minimizing the chance of having obsolete inventory. A smaller investment in inventory means the company either needs less capital or can invest its capital in other earnings activities. However, *too* high an inventory turnover may indicate lost sales as a result of insufficient inventory on hand.

The inventory turnover often is divided into the number of operating days in a "business" year (365, 300, or 250, depending on the industry) so that the inventory segment of the operating cycle may be shown in days. Be careful in developing the average inventory; seasonal factors can affect this average substantially. Also, when a comparison is made of one company to another, both companies should be using similar inventory costing methods. In periods of rising prices, without an adjustment, no valid comparison of inventory turnovers can be made when one company is using FIFO and another company is using LIFO. This is because the company using LIFO will show a higher cost of goods sold and lower inventory than the FIFO company, even though their operations are similar. Therefore, the amounts for the company using LIFO must be adjusted to FIFO, as we discuss in Chapter 8.

Receivables Turnover

After a company has sold its inventory on credit, the company collects the receivables to complete its operating cycle. Dividing net credit sales by average net trade receivables

indicates how many times receivables are “turned over” or collected each period. The receivables turnover is an indicator of how efficiently the company collects its receivables and converts them back into cash. As a general rule, the higher the turnover the better, because the company has less cash tied up in receivables, collects this cash at a faster pace, and usually has fewer uncollectible accounts. When net credit sales information is not available, net sales are used in the calculations. Be careful to consider seasonal factors and to exclude nontrade receivables in developing the average receivables.

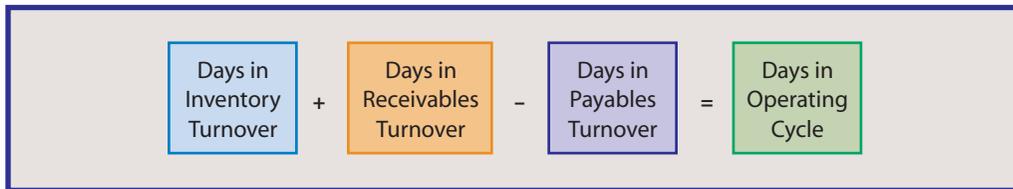
The receivables turnover often is divided into the number of days in the business year to show the average collection period in days. A comparison of a company’s average collection period to the days in its typical credit terms gives an indication of how aggressively the company’s credit department collects overdue accounts.

Payables Turnover

The payables turnover ratio measures the number of times accounts payable turn over during the year. The higher the turnover, the shorter the time between the purchase of inventory and the cash payment. However, too high a turnover may indicate that the company is making payments too quickly and losing the “free” credit provided by accounts payable. Alternatively, if a company’s payables turn over more slowly than the average for its industry, it may indicate that the company is having financial difficulty. It may be preferable to compute the ratio by using purchases as the numerator. In this case purchases can be computed by adding the ending inventory to the cost of goods sold and subtracting the beginning inventory. The payables turnover ratio also may be divided into the number of days in the business year to show the average payment period in days.

Days in Operating Cycle

The three turnover ratios may be analyzed together to estimate the total number of days in the company’s operating cycle from the payment of cash to purchase inventory to the collection of cash from sales. This period is computed by adding the number of days in the inventory turnover to the number of days in the receivables turnover and subtracting the number of days in the payables turnover, as we show in the following diagram. For example, in Example 6-9, the Cooper Company’s operating cycle is 51 ($47 + 33 - 29$) days.



Stability Ratios

Stability ratios are used to evaluate the long-run solvency and stability of a company. They provide evidence of the safety (risk) of the investments in the company by long-term bondholders, preferred stockholders, and common stockholders. Example 6-10 shows several stability ratios, along with the calculations for the Cooper Company. We discuss each ratio in the following sections.

Debt Ratio

The debt ratio indicates the percentage of total assets contributed by creditors. Subtraction of this ratio from 100% shows the percentage of total assets (or *equity ratio*)

EXAMPLE 6-10 Stability Ratios

Ratio	Formula	Calculations (2008)
1. Debt Ratio	$\frac{\text{Total Liabilities}}{\text{Total Assets}}$	$\frac{\$36,200}{\$129,200} = 28\%$
2. Interest Coverage	$\frac{\text{Pretax Operating Income}}{\text{Interest Expense}}$	$\frac{\$15,700 + \$3,000}{\$3,000} = 6.2 \text{ times}$
3. Book Value per Common Share	$\frac{\text{Common Stockholders' Equity}}{\text{Outstanding Common Shares}}$	$\frac{\$93,000 - (\$140 \times 150)}{5,400} = \$13.33 \text{ per common share}$

contributed by stockholders.¹⁵ Sometimes, when a company has issued a significant amount of preferred stock (which has some characteristics of both debt and common stock), the equity ratio is further divided into a preferred equity ratio and a common equity ratio. The appropriate relationship (or “mix”) between the debt and equity ratios depends on the industry. In general, creditors prefer to see a lower debt ratio because, in the event of business decline, their interests are better protected and there is less risk. Up to a point, stockholders prefer a higher debt ratio, particularly when the company is favorably “trading on the equity,” or applying favorable “financial leverage.” This occurs when the company borrows money from creditors at an interest rate (net of income taxes) that is lower than the return the company can earn in its operations. However, an extremely high debt ratio is likely to be a disadvantage when a company wants to attract additional external capital. Investors in both long-term bonds and stocks usually consider a highly leveraged company to be a relatively unstable and more risky investment.

Interest Coverage

The interest coverage ratio (sometimes called the *times interest earned ratio*) is used to evaluate the ability of a company to cover its interest obligations through its annual earnings. It is a measure of the safety of creditors’ (particularly long-term) investments in the company. As a general rule, the higher the interest coverage ratio the better able the company is to meet its interest obligations. While interest obligations are legal commitments, it is also true that continued interest payments are endangered by low earnings over an extended period of time. Because both earnings and interest expense are based on accrual accounting, the interest coverage ratio is slightly inaccurate, since it should include only cash payments for interest and cash receipts from earnings. Such refinements are rarely made to this ratio, however.

The numerator of the interest coverage ratio usually is a form of pretax *operating income*—that is, pretax continuing income to which interest expense is added back. If a company has preferred stock outstanding, a similar calculation may be made to evaluate the safety of preferred dividends. The *preferred dividends coverage ratio* is computed by dividing net income by the annual preferred dividends.

Book Value per Common Share

The book value per common share shows the net assets per share of stock. It is sometimes erroneously referred to as the liquidation value per share. Although the book value per common share frequently is computed, for several reasons it is not very useful as an indicator of a company’s financial stability. First, most companies are going concerns and a related liquidation value is not important. Second, even if a liquidation value were important, the book value per share is based on assets recorded primarily in terms of

15. Sometimes total liabilities are divided by total stockholders’ equity to determine the *debt/equity* ratio.

historical costs and thus has no relation to the liquidation value per share. Third, the market value per share of a company's common stock is important in evaluating its stability. Since book value is based on historical costs, it also has no direct relation to this market value. However, if the market price of a company's common stock falls below its book value per common share, some investors consider this to be unfavorable.

When the book value per share is computed and the company has both preferred and common stock outstanding, the equity relating to the common stock is determined first. To do so, stockholders' equity is separated into its preferred and common stock components on the basis of the legal claims of each class upon liquidation. Typically, preferred stock is allocated its par value unless the stock's characteristics include a liquidation value, in which case the latter value is used. When preferred dividends are cumulative and in arrears, an appropriate portion of retained earnings is also assigned as preferred stockholders' equity. The residual amount of stockholders' equity then is assigned as common stockholders' equity. The book value per common share is computed by dividing this residual stockholders' equity by the number of common shares outstanding. A book value per share of preferred stock also may be computed based on the preferred stockholders' equity and the number of preferred shares outstanding.

Cash Flow Ratios

Cash flow ratios assist a user in understanding relationships and trends among a company's cash flows. Example 6-11 summarizes four of these ratios. We do not compute these ratios for the Cooper Company, because they are not as generally accepted and the statement of cash flows is not provided.

EXAMPLE 6-11 Cash Flow Ratios

Ratio	Formula
1. Cash Flow From Operations to Sales	$\frac{\text{Cash Flow From Operations}}{\text{Sales}}$
2. Cash Flow From Operations to Net Income	$\frac{\text{Cash Flow From Operations}}{\text{Net Income}}$
3. Cash Flow From Operations Per Share	$\frac{\text{Cash Flow From Operations}}{\text{Average Shares of Common Stock Outstanding}}$
4. Cash Flow From Operations to Maturing Debt	$\frac{\text{Cash Flow From Operations}}{\text{Debt Maturing Next Year}}$

Cash Flow from Operations (CFO) to Sales

This ratio is used to evaluate the cash generated from sales, and the management of cash collections and payments. It enables users to understand the proportion of each sales dollar that is available for investing and financing activities. A comparison of the ratio with the profit margin may be useful. Generally, the CFO to sales ratio is higher than the profit margin, because noncash expenses such as depreciation are deducted in computing net income.

Cash Flow from Operations to Net Income

This ratio enables users to understand how the earning of net income relates to the receipt of CFO. While many users consider CFO as important as income, be careful because income is computed on the accrual basis, whereas CFO may vary depending on

when cash flows occur. Management may find it easier to influence the timing of cash flows than the measurement of income.

Cash Flow from Operations per Share

Disclosure of CFO per share is expressly prohibited by GAAP for the reasons we discussed above. However, users may wish to compute it, using the weighted average number of shares that the company discloses for its computation of earnings per share.

Cash Flow from Operations to Maturing Debt

Since CFO is usually the primary source of cash, this ratio measures the ability of a company to make principal payments. It is an indicator of whether the company has the capacity to borrow additional debt.

Other cash flow ratios include CFO divided by cash operating expenses, total assets, or total liabilities, and CFO divided by the cash flows for investing activities that are needed to maintain the operating capacity of the company.

SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Describe an auditor's report.** In an audit report, the auditor expresses three opinions. The first relates to management's assessment of the company's internal control over its financial reporting. The second relates to whether this internal control was maintained by the company. The third relates to the fairness of the financial statements in accordance with generally accepted accounting principles.
2. **Understand the meaning of an operating segment.** An operating segment is a component of a company that engages in activities to earn revenues and incur expenses, whose operating results are regularly reviewed by the company's chief operating officer, and for which financial information is available.
3. **Describe the disclosures in a segment report.** In a segment report, a company provides general information (e.g., types of products); information about the profit (or loss) and total assets of each reportable segment; reconciliations to the company's total revenues, pretax income from continuing operations, and total assets; and various company-wide information.
4. **Explain interim reporting.** Interim financial statements are financial reports for periods of less than a year. Their purpose is to improve the timeliness of accounting information. In developing an interim report, each interim period is viewed primarily as an integral part of an annual period.
5. **Prepare an interim report.** To prepare an interim report, first a trial balance is prepared on a working paper. Next, year-to-date adjusting entries are recorded on the working paper. Then, the interim financial statements are prepared. In preparing the statements, inventory may have to be estimated, the adjusting entries are not entered into the accounts, and closing entries are not made.
6. **Understand intracompany and intercompany comparisons (Appendix).** Intracompany comparison involves comparing a company's current financial performance and condition to the company's past results. Intercompany comparison involves comparing a company's performance with that of competitors, with the industry as a whole, or with the results in related industries.
7. **Prepare horizontal and vertical percentage analyses (Appendix).** In horizontal analysis, changes in a company's operating results and financial position over time are shown in percentages as well as in dollars. In vertical analysis, the monetary relationships between items on a company's financial statements for a particular period are shown in percentages as well as in dollars.
8. **Perform ratio analysis (Appendix).** A ratio involves dividing one or more items on a company's financial statements by another related item or items. Ratio analysis involves computing ratios to evaluate a company's performance using intracompany and intercompany analysis. The six groups of ratios include (1) stockholder profitability, (2) company profitability, (3) liquidity, (4) activity, (5) stability, and (6) cash flow ratios.

ANSWERS TO REAL REPORT QUESTIONS

Real Report 6-1 Answers

1. Internal controls are in place to provide reasonable assurance as to the integrity and reliability of the financial statements. Wachovia also states that it has conducted an evaluation of its internal controls over financial reporting and concluded that the internal controls were effective. This conclusion (assertion) has been audited by Wachovia's auditors.
2. In this context, the concept of reasonable assurance takes into account that one cannot be absolutely sure that the

financial statements are not materially misstated, that assets were improperly used or stolen, or that fraud has not occurred. Reasonable assurance takes into account that mistakes can still occur, differences in judgment may exist, and that controls in place can still be circumvented. Nevertheless, reasonable assurance is still a high level of assurance that most would interpret as a remote likelihood that the internal controls did not prevent or detect material misstatements on a timely basis.

QUESTIONS

Q6-1 What does *efficient markets hypothesis* research show and what does an "efficient capital market" mean?

Q6-2 In an audit report, what three opinions are expressed by the auditor?

Q6-3 What is an *audit committee*? Generally, what are its duties?

Q6-4 Why do investors and creditors desire financial information concerning the operating segments of a company?

Q6-5 Briefly describe the three alternative tests used to determine a "reportable segment."

Q6-6 Briefly describe the information that a company reports in regard to the profit (or loss) and assets of each reportable segment.

Q6-7 What company-wide disclosures must a company make related to its operating segments?

Q6-8 What are *interim financial statements* and why are they issued?

Q6-9 What specific principles must a company apply to the reporting of inventories in its interim financial reports?

Q6-10 What principles does a company apply to the accounting for expenses not directly associated with product sales during an interim period?

Q6-11 Briefly explain how the accounting procedures for preparing a company's interim reports are (a) similar and (b) dissimilar to those used in preparing annual reports.

Q6-12 List the minimum disclosures that must be made by a publicly held company in its interim financial report.

Q6-13 List the responsibilities of the Chief Accountant and the Division of Corporation Finance of the SEC.

Q6-14 What are the two SEC reports that are important to accountants?

Q6-15 (Appendix) What two types of comparisons may external users make in their financial decision making? Why is knowledge of these comparisons important to accountants?

Q6-16 (Appendix) What is *horizontal analysis* and how is it prepared?

Q6-17 (Appendix) What is *vertical analysis* and how does it differ from horizontal analysis?

Q6-18 (Appendix) What is *ratio analysis* and how is it used?

Q6-19 (Appendix) Briefly describe how each of the stockholder profitability ratios is computed.

Q6-20 (Appendix) Briefly describe how each of the company profitability ratios is computed.

Q6-21 (Appendix) Which financial ratios may be used to evaluate the effectiveness and efficiency of a company's reportable operating segments?

Q6-22 (Appendix) Briefly describe how each of the liquidity ratios is computed.

Q6-23 (Appendix) Briefly describe how each of the activity ratios is computed.

Q6-24 (Appendix) Briefly describe how each of the stability ratios is computed.

MULTIPLE CHOICE (AICPA Adapted)

Select the best answer for each of the following.

M6-1 The computation of a company's third-quarter provision for income taxes should be based on earnings

- For the quarter at an expected annual effective income tax rate
- For the quarter at the statutory rate
- To date at an expected annual effective income tax rate less prior quarters' provisions
- To date at the statutory rate less prior quarters' provisions

M6-2 Which of the following ratios measures short-term solvency?

- Current ratio
- Age of receivables
- Creditors' equity to total assets
- Return on investment

M6-3 Kaycee Corporation's revenues for the current year were as follows:

Consolidated revenue per income statement	\$1,200,000
Intersegment sales	180,000
Intersegment transfers	<u>60,000</u>
Combined revenues of all operating segments	<u>\$1,440,000</u>

Kaycee has a reportable segment if that operating segment's revenues exceed

- \$6,000
- \$24,000
- \$120,000
- \$144,000

M6-4 An inventory loss from a market decline occurred in the first quarter that was not expected to be restored in the fiscal year. For interim financial reporting purposes, how would the dollar amount of inventory in the balance sheet be affected in the first and fourth quarters?

First Quarter	Fourth Quarter
a. Decrease	No effect
b. Decrease	Increase
c. No effect	Decrease
d. No effect	No effect

M6-5 Barr Corporation's capital stock at December 31, 2007 consisted of the following:

Common stock, \$2 par value; 100,000 shares authorized, issued, and outstanding
10% noncumulative, nonconvertible preferred stock, \$100 par value; 1,000 shares authorized, issued, and outstanding

Barr's common stock, which is listed on a major stock exchange, was quoted at \$4 per share on December 31, 2007. Barr's net income for the year ended December 31, 2007 was \$50,000. The 2007 preferred dividend was declared. No

capital stock transactions occurred during 2007. What was the price/earnings ratio on Barr's common stock at December 31, 2007?

- 8 to 1
- 10 to 1
- 16 to 1
- 20 to 1

M6-6 In August 2007, Ella Company spent \$150,000 on an advertising campaign for subscriptions to the magazine it sells on getting ready for the skiing season. There are only two issues: one in October and one in November. The magazine is only sold on a subscription basis and the subscriptions started in October 2007. Assuming Ella's fiscal year ends on March 31, 2008, what amount of expense should be included in Ella's quarterly income statement for the three months ended December 31, 2007 as a result of this expenditure?

- \$37,500
- \$50,000
- \$75,000
- \$150,000

M6-7 When a company reports the profit (or loss) for a reportable operating segment, it also must disclose the segment's

- Revenues
- Interest revenue and interest expense
- Depreciation, depletion, and amortization expense
- All of the above

M6-8 Utica Company's net accounts receivable were \$250,000 at December 31, 2006 and \$300,000 at December 31, 2007. Net cash sales for 2007 were \$100,000. The accounts receivable turnover for 2007 was 5.0. What were Utica's total net sales for 2007?

- \$1,475,000
- \$1,500,000
- \$1,600,000
- \$2,750,000

M6-9 During 2007, Red, Incorporated purchased \$2,000,000 of inventory. The cost of goods sold for 2007 was \$2,200,000, and the ending inventory at December 31, 2007 was \$400,000. What was the inventory turnover for 2007?

- 4.0
- 4.4
- 5.5
- 11.0

M6-10 The following data pertain to Cowl, Inc. for the year ended December 31, 2007:

Net sales	\$ 600,000
Net income	150,000
Total assets, January 1, 2007	2,000,000
Total assets, December 31, 2007	3,000,000

What was Cowl's rate of return on assets for 2007?

- 5%
- 6%
- 20%
- 24%

EXERCISES

E6-1 Segment Reporting York Drug Company has two reportable operating segments, A and B. The 2007 condensed income statement for the entire company is as follows:

Sales	\$90,000
Cost of goods sold	<u>(50,000)</u>
Gross profit	\$40,000
Operating expenses	<u>(18,000)</u>
Income before income taxes	\$22,000
Income tax expense	<u>(8,800)</u>
Net Income	<u><u>\$13,200</u></u>

Additional Information:

1. Sales are made as follows: Segment A, \$52,000; Segment B, \$26,000; other segments, \$12,000 of the total.
2. Cost of goods sold for each segment is as follows: Segment A, \$30,000; Segment B, \$12,500; other segments, \$7,500.
3. Operating expenses are identified with the segments as follows: Segment A, \$10,000; Segment B, \$4,500; other segments, \$3,500. There are no general corporate expenses.
4. The company has \$110,000 total assets as of December 31, 2007. These assets are assigned to the segments as follows: Segment A, \$49,500; Segment B, \$38,500; other segments, \$22,000. There are no general corporate assets.

Required

Prepare a schedule that reports on the 2007 revenues, profit, and assets of Segments A and B and the other segments of the York Drug Company.

E6-2 Segment Reporting The Wilson Diversified Company has total assets of \$130,000 at the end of 2007 and the following condensed income statement for 2007:

Sales	\$90,000
Operating expenses	<u>(66,600)</u>
Income before income taxes	\$23,400
Income tax expense	<u>(7,020)</u>
Net income	<u><u>\$16,380</u></u>

The company has two reportable operating segments and has developed the following related information:

	Segments			Total
	1	2	Other	
Sales	\$51,700	\$24,400	\$13,900	\$ 90,000
Operating expenses	36,780	15,400	10,420	66,600 ^a
Segment assets	70,300	28,740	21,960	130,000 ^b

- a. Of the \$66,600 total operating expenses, \$4,000 are general corporate expenses.
- b. Of the \$130,000 total assets, \$9,000 are general corporate assets.

Required

Prepare a schedule that reports on the revenues, profit, and assets of Segments 1 and 2 and the other operating segments of the Wilson Diversified Company for 2007. Be sure to include the appropriate reconciliations.

E6-3 Segment Reporting Parks Conglomerate Company does business in several different industries. The following is a 2007 condensed income statement for the entire company:

Sales	\$300,000
Less:	
Cost of goods sold	\$140,000
Depreciation expense	30,000
Other operating expenses	<u>60,000</u>
Total expenses	<u>(230,000)</u>
Pretax income	\$ 70,000
Income tax expense	<u>(21,000)</u>
Net income	<u><u>\$ 49,000</u></u>

Earnings per share (20,000 shares)	<u><u>\$2.45</u></u>
------------------------------------	----------------------

Parks has two major operating segments, A and B. No other operating segment contributes 10% or more of the company's activities. Segments A and B make no sales to each other or to the other segments of the company. An analysis reveals that \$2,000 of the total depreciation expense and \$6,000 of the total other operating expenses are related to general corporate activities. The *remaining* expenses and total revenues are directly allocable to segment activities according to the following percentages:

	Percent Identified with		
	Segment A	Segment B	Other Segments
Sales	40%	46%	14%
Cost of goods sold	35	50	15
Depreciation expense	40	45	15
Other operating expenses	42	40	18

Required

Prepare a schedule that reports on the revenues and profit of Segments A and B and the other operating segments of the Parks Conglomerate Company for 2007. Be sure to reconcile these amounts with the related totals on the preceding income statement. Include notes summarizing the depreciation related to each operating segment and the computation of segment profits.

E6-4 Determination of Reportable Segments Straub Diversified Company has five different operating segments. None of these segments makes sales to the other segments. The company has total assets of \$155,000 at the end of 2007 and lists the following condensed income statement for 2007:

Sales	\$100,000
Operating expenses	(72,000)
Pretax income	\$ 28,000
Income taxes	(8,400)
Net income	\$ 19,600

In preparing its segmental reporting schedule, the company determined that it has \$7,000 of general corporate expenses and \$10,000 of general corporate assets. It also developed the following information for each of its five segments:

	Segment				
	1	2	3	4	5
Sales	\$ 9,200	\$ 8,800	\$ 9,000	\$63,900	\$ 9,100
Segment profit	3,300	3,200	3,400	21,500	3,600
Segment assets	15,100	13,900	14,300	87,900	13,800

Required

On the basis of the preceding information:

- Determine which segments are reportable operating segments (justify your conclusions).
- Prepare a schedule that reports on the revenues, profit, and assets of the reportable operating segments and the remaining segments of the Straub Diversified Company for 2007. Reconcile these amounts to the related totals on the income statement and to total assets. Notes to the schedule are not necessary.

E6-5 Interim Reporting Jersey Company is in the process of developing its first-quarter interim report. It has developed the following condensed trial balance as of March 31, 2007:

	Debit	Credit
Cash	\$ 900	
Accounts receivable (net)	4,000	
Inventory	8,500	
Prepaid insurance	4,800	
Note receivable	6,000	
Land	3,000	
Buildings and equipment (net)	36,000	
Accounts payable		\$ 9,100
Common stock, \$1 par		6,000
Premium on common stock		12,400
Retained earnings (1/1/07)		23,080
Sales (net)		50,000

(continued)

	Debit	Credit
Cost of goods sold	26,500	
Selling expenses	6,500	
General and administrative expenses	4,380	
	<u>\$100,580</u>	<u>\$100,580</u>

Additional information:

1. The company makes formal adjusting entries at year-end and enters the amounts in the appropriate accounts at that time.
2. The company uses control accounts for selling expenses and for general and administrative expenses.
3. Uncollectible accounts typically average 1% of net sales.
4. On January 1, 2007, buildings and equipment (net) have an average remaining life of 10 years. One-third of the account balance consists of assets related to selling activities. The company uses straight-line depreciation with no residual value.
5. The note receivable is dated January 1, 2007, matures on January 1, 2009, and carries an annual interest rate of 12% (interest will not be collected until the maturity date).
6. On January 1, 2007, the company had purchased a 3-year insurance policy, debiting Prepaid Insurance for the \$4,800 payment.
7. The company expects its annual effective income tax rate to be 30%. Income taxes for 2007 will be paid at the beginning of 2008.
8. No common stock has been issued or retired in 2007.

Required 

On the basis of the preceding information, prepare the Jersey Company income statement for the first quarter of 2007 and a March 31, 2007 balance sheet. A worksheet is not required, but you should be prepared to document any adjustments you make to the preceding accounts.

E6-6 Interim Reporting The Howard Corporation presented the following trial balance for the quarter ended March 31, 2007:

	Debit	Credit
Cash	\$ 9,800	
Accounts receivable	13,000	
Inventory (1/1/07)	10,000	
Prepaid insurance	9,600	
Land	16,000	
Buildings and equipment	108,000	
Accumulated depreciation		\$ 36,000
Accounts payable		28,200
Common stock, \$1 par		13,200
Additional paid-in capital		24,800
Retained earnings (1/1/07)		44,900
Sales (net)		100,000
Purchases (net)	59,000	
Selling expenses	12,000	
General and administrative expenses	9,700	
Totals	<u>\$247,100</u>	<u>\$247,100</u>

Additional information:

1. The company uses control accounts for selling expenses and for general and administrative expenses.
2. The company makes formal adjusting entries at year-end and enters the amounts in the appropriate accounts at that time.
3. The company uses a periodic inventory system. It uses the gross profit method to determine interim inventory. Historical gross profit has averaged 43% of net sales.
4. On January 1, 2007, the company purchased a 4-year insurance policy for \$9,600.
5. No common stock has been issued or retired in 2007.
6. The buildings and equipment have an estimated life of 15 years with no residual value. The company uses straight-line depreciation; it records one-fourth of the depreciation as a selling expense and the remainder as a general and administrative expense.
7. The company expects its annual effective income tax rate to be 30%; income taxes will be paid at the beginning of the next year.

Required

On the basis of the preceding information, prepare the Howard Corporation income statement for the first quarter of 2007 and a March 31, 2007 balance sheet. A worksheet is not required, but you should be prepared to substantiate any adjustments you make to the preceding accounts.

E6-7 Interim Reporting The Hill Company prepares quarterly and year-to-date interim reports. The following is its interim income statement for the quarter ended March 31, 2007:

Sales (net)		\$150,000	
Cost of goods sold		<u>(90,000)</u>	
Gross profit		\$ 60,000	
Operating expenses			
Selling expenses	\$18,000		
General expenses	10,600		
Depreciation expense	<u>8,000</u>	<u>(36,600)</u>	
Pretax operating income		\$ 23,400	
Other items			
Dividend revenue	\$ 600		
Interest expense	<u>(1,000)</u>	<u>(400)</u>	
Income before income taxes		\$ 23,000	
Income tax expense		<u>(7,000)</u>	
Net income		<u>\$ 16,000</u>	
Earnings per share (20,000 shares)		<u>\$.80</u>	

On June 30, 2007, the company accountant completed a worksheet in preparation for developing the year-to-date interim income statement. The following are the accounts and amounts listed in the income statement debit and credit columns of this worksheet:

	Debit	Credit
Sales (net)		\$340,000
Interest revenue		500
Dividend revenue		1,000
Cost of goods sold	\$190,000	
Selling expenses	50,000	
General expenses	20,000	
Depreciation expense	16,000	
Interest expense	2,100	
Income tax expense	19,200	

Required

Based on the given information, and assuming 20,000 shares of common stock have been outstanding for the entire 6 months, for the Hill Company prepare:

1. A year-to-date interim income statement for the first 6 months of 2007.
2. An interim income statement for the second quarter of 2007.

E6-8 Interim Taxes Farris Company is subject to income taxes at a rate of 20% on its first \$50,000 of income and 35% on any income in excess of \$50,000. In the process of preparing its interim reports, each quarter Farris Company uses an estimated effective income tax rate based on its estimated annual income. The following is a schedule that shows the company's actual year-to-date pretax income and the estimate of the annual pretax income made at the end of each quarter. The company neither anticipates nor incurs any extraordinary items, and its pretax accounting income is the same as its taxable income.

	Pretax Income Amounts at End of			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Actual income (year-to-date)	\$20,000	\$42,000	\$60,000	\$82,000
Estimated remaining income	<u>60,000</u>	<u>44,000</u>	<u>21,000</u>	<u>—</u>
Estimated annual pretax income	<u>\$80,000</u>	<u>\$86,000</u>	<u>\$81,000</u>	<u>\$82,000</u>

Required 

Based on the preceding information, prepare a schedule for Farris Company to compute the income tax expense that would be listed on *each* quarterly income statement. (Carry your effective income tax rate computation to three decimal places.)

E6-9 Horizontal Analyses (Appendix) Slusher Company presents the following condensed comparative income statements for 2006, 2007, and 2008:

	For Years Ended December 31,		
	2008	2007	2006
Sales (net)	\$ 120,000	\$ 100,000	\$ 85,000
Cost of goods sold	<u>(72,000)</u>	<u>(55,000)</u>	<u>(45,000)</u>
Gross profit	\$ 48,000	\$ 45,000	\$ 40,000
Operating expenses	<u>(22,000)</u>	<u>(20,000)</u>	<u>(18,000)</u>
Operating income	\$ 26,000	\$ 25,000	\$ 22,000
Other items			
Dividend revenue	400	500	200
Interest expense	<u>(1,200)</u>	<u>(1,000)</u>	<u>(500)</u>
Income before income taxes	\$ 25,200	\$ 24,500	\$ 21,700
Income tax expense	<u>(8,200)</u>	<u>(8,000)</u>	<u>(6,000)</u>
Net income	<u>\$ 17,000</u>	<u>\$ 16,500</u>	<u>\$ 15,700</u>
Number of common shares	6,000	6,000	5,000
Earnings per share	<u>\$2.83</u>	<u>\$2.75</u>	<u>\$3.14</u>

Required

Based on the preceding information for Slusher Company, prepare horizontal analyses for the years 2006, 2007, and 2008 using (1) a year-to-year approach and (2) a base-year-to-date approach. Do your analyses reveal any favorable or unfavorable trends?

E6-10 Vertical Analyses (Appendix) The Samuels Company presents the following condensed income statement and balance sheet information for 2007 and 2008.

Income Statements

	For Years Ended December 31,	
	2008	2007
Sales (net)	\$ 100,000	\$ 90,000
Cost of goods sold	<u>(60,000)</u>	<u>(51,000)</u>
Gross profit	\$ 40,000	\$ 39,000
Operating expenses	(21,300)	(21,900)
Interest revenue	1,500	1,400
Interest expense	<u>(3,700)</u>	<u>(2,500)</u>
Income before income taxes	\$ 16,500	\$ 16,000
Income tax expense	<u>(5,000)</u>	<u>(4,700)</u>
Net income	<u>\$ 11,500</u>	<u>\$ 11,300</u>
Earnings per share	<u>\$1.92</u>	<u>\$1.95</u>

Balance Sheets

	December 31,	
	2008	2007
Cash	\$ 3,000	\$ 2,000
Receivables (net)	7,000	8,000
Inventories	11,000	12,000
Long-term investments (bonds)	20,000	15,000
Property and equipment (net)	<u>79,000</u>	<u>63,000</u>
Total Assets	<u>\$120,000</u>	<u>\$100,000</u>

	2008	2007
Current liabilities	\$ 10,000	\$ 11,400
Bonds payable, 10%	37,000	25,000
Common stock, \$2 par	12,000	11,600
Premium on common stock	21,000	19,500
Retained earnings	<u>40,000</u>	<u>32,500</u>
Total Liabilities and Stockholders' Equity	<u>\$120,000</u>	<u>\$100,000</u>

Required

Based on the preceding information for Samuels Company, prepare vertical analyses of the income statements and balance sheets for 2008 and 2007. Do your analyses reveal any trends in the company's operations and financial position?

E6-11 Ratios (Appendix) The following are a condensed income statement for 2007 and a December 31, 2007 balance sheet for the Allen Company:

Income Statement	
Sales (net)	\$304,400
Cost of goods sold	<u>(183,600)</u>
Gross profit	\$120,800
Operating expenses	(82,000)
Interest expense	<u>(7,000)</u>
Income before income taxes	\$ 31,800
Income taxes	<u>(10,000)</u>
Net income	<u>\$ 21,800</u>

Balance Sheet			
Cash	\$ 8,200	Accounts payable	\$ 18,000
Receivables (net)	14,700	Other current liabilities	6,800
Inventory	19,300	Bonds payable, 10%	70,000
Property, plant, and equipment (net)	<u>195,800</u>	Common stock, \$10 par	80,500
		Premium on common stock	24,000
		Retained earnings	<u>38,700</u>
Total Assets	<u>\$238,000</u>	Total Liabilities and Stockholders' Equity	<u>\$238,000</u>

Additional information: The corporate common stock was outstanding the entire year and is selling for \$16 per share at year-end. On January 1, 2007, the inventory was \$21,500, the total assets were \$224,000, the accounts payable were \$18,800, and the total stockholders' equity was \$130,800. The company operates on a 300-day business year.

Required 

For the Allen Company, compute the following ratios:

- Price/earnings
- Profit margin
- Return on total assets
- Return on stockholders' equity
- Current
- Inventory turnover (in days)
- Payables turnover (in days)
- Debt

Is the company favorably "trading on its equity"? Explain.

E6-12 Ratios (Appendix) The Byers Company presents the following condensed income statement for 2007 and condensed December 31, 2007 balance sheet:

Income Statement	
Sales (net)	\$267,000
Less:	
Cost of goods sold	\$160,000
Operating expenses	62,000
Interest expense	11,000
Income taxes	<u>10,000</u>
Total expenses	<u>(243,000)</u>
Net income	<u>\$ 24,000</u>

Balance Sheet

Cash	\$ 10,000	Current liabilities	\$ 40,000
Receivables (net)	22,000	Bonds payable, 10%	110,000
Inventory	56,000	Preferred stock, \$100 par	50,000
Long-term investments	30,000	Common stock, \$10 par	100,000
Property and equipment (net)	<u>282,000</u>	Additional paid-in capital	45,000
		Retained earnings	<u>55,000</u>
Total Assets	<u>\$400,000</u>	Total Liabilities and Stockholders' Equity	<u>\$400,000</u>

Additional information:

- The company's common stock and preferred stock were outstanding the entire year.
- Dividends of \$1.50 per share on the common stock and \$6 per share on the preferred stock were declared in 2007.
- On December 31, 2007, the common stock is selling for \$20 per share.
- The preferred stock has a liquidation value of \$110 per share.
- On January 1, 2007, the accounts receivable (net) balance was \$24,000 and the total stockholders' equity was \$246,000.
- Of the company's net sales, 78% are on credit.
- The company operates on a 365-day business year.

Required

On the basis of the preceding information, compute the following ratios for the Byers Company:

- Earnings per share
- Dividend yield
- Return on stockholders' equity
- Current
- Acid-test
- Receivables turnover (in days)
- Interest coverage
- Book value per common share

On the basis of applicable "rules of thumb," what information is revealed by the acid-test ratio that is not disclosed by the current ratio?

E6-13 AICPA Adapted Ratios (Appendix) Daley, Inc. is consistently profitable. Daley's normal financial statement relationships are as follows:

- Current ratio: 3 to 1
- Inventory turnover: 4 times
- Total debt/total assets ratio: 0.5 to 1

In 2007, Daley was involved in the following transactions and events:

- Daley issued a stock dividend.
- Daley declared, but did not pay, a cash dividend.
- Customers returned invoiced goods for which they had not paid.
- Accounts payable were paid on December 31, 2007.
- Daley recorded both a receivable from its insurance company and a loss from fire damage to a factory building.
- Early in 2007, Daley increased the selling price of one of its products that had a demand in excess of capacity. The number of units sold in 2006 and 2007 was the same.

Required

For items 1 through 6, determine whether each 2007 transaction or event increased (I), decreased (D), or had no effect (N) on each of the 2007 ratios.

PROBLEMS

P6-1 Income Statement and Segment Reporting Frahm Corporation presents the following account balances, after adjustments, on December 31, 2007:

Administrative and office salaries	\$ 43,000	Sales salaries and commissions	\$ 59,000
Interest expense	8,800	Property taxes	7,000
Bad debts expense	6,000	Depreciation expense: buildings,	
Sales (net)	600,000	sales equipment, and office equipment	31,000
Loss due to tornado (pretax)	12,000	Cost of goods sold	323,700
Advertising expense	40,000	Delivery expense	25,000
Miscellaneous office expenses	2,300	Interest revenue	3,000

The following information is also available:

- The income tax rate on all items is 30%.
- 10,000 shares of common stock have been outstanding the entire year.
- Frahm Corporation operates several divisions, two of which, Divisions B and C, are considered reportable operating segments.
- Sales (net) are made as follows: Division B, 60%; Division C, 25%; other divisions, 15% of the total. No intersegment sales are made.
- The cost of goods sold as a *percentage of net sales* in each division is as follows: Division B, 55%; Division C, 52%; other divisions, 53%.
- Operating expenses are traceable to divisions as follows:
 - Sales salaries directly traceable to Division B total \$27,000; Division C, \$12,000; other divisions, \$8,000.
 - Sales commissions in each division are 2% of net sales.
 - Bad debts average 1% of net sales in each division.
 - Of the total delivery expense, 64% was spent in Division B, 20% was spent in Division C, and 16% was spent in the other divisions.
 - Of the total advertising expense, \$5,000 was spent on general advertising. Of the remainder, 52% was spent in Division B, 28% in Division C, and 20% in the other divisions.
 - Administrative and office salaries are considered general corporate expenses, except for \$17,000 allocated for the management of Division B, \$12,000 for the management of Division C, and \$10,000 for the management of the other divisions.
 - Property taxes paid are \$4,000 in Division B, \$2,000 in Division C, and \$1,000 in other divisions.
 - Miscellaneous office expenses are not directly traced to divisions.
- The depreciation expense is listed as a separate component on the corporate income statement. Of the total listed, \$6,000 is due to depreciation on the corporate headquarters building and is not allocated. Of the remainder, \$15,000 is traceable to Division B, \$6,000 is traceable to Division C, and \$4,000 is traceable to the other divisions.
- Interest expense is for corporate bonds used to finance overall operating activities. Interest revenue is from corporate investments in marketable securities.
- An infrequent and unusual tornado caused a warehouse used in Division B to be severely damaged, resulting in the material pretax loss shown earlier.
- Of the \$1,600,000 total company assets at year-end, \$910,000 are assets of Division B, \$420,000 are assets of Division C, \$140,000 are assets of the remaining divisions, and \$130,000 are assets related to corporate headquarters.
- Capital expenditures of Divisions B and C amounted to \$50,000 and \$27,000, respectively, in 2007 and are included in the total company assets at year-end.

Required

- Prepare a single-step 2007 income statement for the Frahm Corporation.
- Prepare a separate schedule that shows the revenues, profit, and assets of Divisions B and C and the remaining operating divisions.
- Prepare appropriate segment notes relating to depreciation, profits, and capital expenditures.
- (Appendix) Compute the profit margin *before* income taxes for Divisions B and C, and for the other divisions. What do these ratios reveal?

P6-2 Income Statement and Segment Reporting The following accounts are taken from the December 31, 2007 adjusted trial balance of the Reed Company:

Cost of goods sold	\$121,120	Loss due to flood (pretax)	\$ 8,000
Interest expense	4,880	Sales (net)	200,000
Depreciation expense	7,000	Administrative expenses	16,000
Selling expenses	26,000	Interest revenue	1,000

Additional information:

- The company had 5,000 shares of common stock outstanding the entire year.
- The income tax rate is 30% on all items.
- The Reed Company operates several divisions, two of which, Divisions 1 and 2, are reportable operating segments.
- No intersegment sales are made by any division. Of the total sales (net), Division 1 made 49%; Division 2, 30%; and the remaining segments, 21%.
- Cost of goods sold as a *percentage of net sales* in each division was: Division 1, 62%; Division 2, 60%; other segments, 58%.
- Selling expenses consist of sales salaries, sales commissions, delivery costs, advertising, and miscellaneous expenses. These are traceable to the segments as follows:
 - Sales salaries (\$6,000): \$3,000 to Division 1, \$2,000 to Division 2, and \$1,000 to the remaining segments.
 - Sales commissions (\$4,000): 2% of net sales in all segments.

- c. Delivery costs (\$5,000): 60% to Division 1, 30% to Division 2, and 10% to the remaining segments.
 - d. Advertising (\$10,500): Of the total, \$1,200 was spent on general advertising. The remainder was spent as follows: \$4,600 in Division 1, \$3,200 in Division 2, and \$1,500 in the other segments.
 - e. The miscellaneous selling expenses of \$500 are considered common costs and are not allocated to any segments.
7. Administrative expenses consist of bad debts, administrative salaries, property taxes, and miscellaneous expenses. These are allocable to the segments as follows:
 - a. Bad debts (\$2,000): 1% of net sales in all segments.
 - b. Administrative salaries (\$10,000): Of the total, \$2,100 are considered general corporate salaries. The remainder is allocated \$3,800 to Division 1, \$2,500 to Division 2, and \$1,600 to the other segments.
 - c. Property taxes (\$3,000): Of the total, \$1,600 are general corporate expenses. Of the remainder, 40% is allocable to Division 1, 35% to Division 2, and 25% to the remaining segments.
 - d. The miscellaneous administrative expenses of \$1,000 are considered common costs and are not allocated to any segments.
 8. Depreciation expense is listed as a separate item on the income statement. Of the total, \$1,400 is a general corporate expense. Of the remainder, 40% is allocable to Division 1, 30% to Division 2, and 30% to the remaining segments.
 9. Interest revenue is from corporate investments in marketable securities. Interest expense is related to corporate bonds used to finance general operating activities.
 10. An unusual and infrequent flood causing the material pretax loss occurred in Division 1.
 11. Of the \$300,000 total assets on December 31, 2007, 45% are assets of Division 1, 29% are assets of Division 2, 18% are assets of the remaining segments, and 8% are assets related to corporate headquarters.
 12. Capital expenditures amounted to \$25,000 in Division 1 and \$6,000 in Division 2 during 2007 and are included in the total assets on December 31, 2007.

Required

1. Prepare a 2007 multiple-step income statement for the Reed Company.
2. Prepare a separate schedule that discloses the revenues, profit, and assets of Divisions 1 and 2, and the remaining operating segments.
3. Prepare appropriate segment notes related to depreciation, profit, and capital expenditures.
4. (*Appendix*) Compute the *pretax* return on identifiable assets for Divisions 1 and 2, and for the other divisions. What do these ratios reveal?

P6-3 Interim Reporting The Schultz Company prepares interim financial statements at the end of each quarter. The income statement presented at the end of the first quarter of 2007 is as follows:

Sales (net)	\$40,000	
Cost of goods sold	<u>(23,000)</u>	
Gross profit	\$17,000	
Operating expenses:		
Selling expenses	\$8,800	
Administrative expenses	<u>4,210</u>	
Total operating expenses	<u>(13,010)</u>	
Pretax operating income	\$ 3,990	
Other items:		
Interest revenue	\$ 40	
Rent revenue	300	
Interest expense	<u>(330)</u>	<u>10</u>
Income before income taxes	\$ 4,000	
Income tax expense	<u>(700)</u>	
Net income	<u>\$ 3,300</u>	
Earnings per share (8,000 shares)		<u>\$.41</u>

Shown next is the Schultz Company trial balance as of June 30, 2007:

	Debit	Credit
Cash	\$ 7,200	
Accounts receivable (net)	10,300	
Note receivable (due 9/1/07)	4,000	
Inventory	24,400	
Prepaid insurance	960	
Property and equipment	80,000	

	Debit	Credit
Accumulated depreciation		\$ 20,000
Accounts payable		8,000
Dividends payable		3,200
Unearned rent		1,800
Bonds payable, 10% (due 1/1/2012)		12,000
Discount on bonds payable	600	
Common stock, \$1 par		8,000
Premium on common stock		34,580
Retained earnings		26,400
Sales (net)		90,000
Cost of goods sold	48,600	
Selling expenses	19,750	
Administrative expenses	8,170	
	<u>\$203,980</u>	<u>\$203,980</u>

Additional information:

- The company uses a perpetual inventory system.
- The company uses control accounts for selling and administrative expenses.
- The company journalizes and posts its adjusting entries to its accounts *only at year-end*.
- Uncollectible accounts average 0.5% of net sales.
- The \$4,000 note receivable was received on March 1, 2007. The 6-month note carries an annual interest rate of 12%, the interest to be collected at the maturity date.
- The balance in the Prepaid Insurance account represents payment made on January 1, 2007 for a one-year comprehensive insurance policy.
- The Property and Equipment account consists of land, \$5,000; buildings, \$55,000; and equipment, \$20,000. The buildings are being depreciated over a 25-year life; the equipment over an 8-year life. Straight-line depreciation is used; residual value is disregarded. No acquisitions have been made in 2007. The depreciation on the buildings is treated as an administrative expense; depreciation on the equipment as a selling expense.
- On February 1, 2007, the company rented some floor space to another company, receiving one year's rent of \$1,800 in advance.
- The bonds pay interest semiannually on January 1 and July 1. Straight-line amortization of the discount is recorded at the end of each year.
- The company estimates that its pretax income for the second half of 2007 will total \$11,550. All items in income are subject to the same income tax rate schedule. The income tax rate schedule is 15% on the first \$20,000 of taxable income and 30% on the excess. There is no difference between the company's pretax financial income and taxable income, and no tax credits are available. The company rounds its estimated effective income tax rate to the nearest tenth of a percent. Income taxes will be paid during the first quarter of 2008.
- On June 29, 2007, the company had declared and recorded (directly in Retained Earnings) a semiannual dividend of 40¢ per share, payable on August 3, 2007.
- The 8,000 shares of common stock have been outstanding the entire 6 months of 2007.

Required 

- Prepare a 10-column worksheet to develop the Schultz Company financial statements for the first 6 months of 2007 (refer to Chapter 3 for a worksheet illustration, if necessary).
- Prepare the income statement for (a) the first 6 months of 2007 and (b) the second quarter of 2007.
- Prepare a retained earnings statement for the first 6 months of 2007.
- Prepare the June 30, 2007 balance sheet.

P6-4 Interim Reporting The Sikyta Company prepares quarterly and year-to-date financial statements at the end of each quarter. The income statement presented at the end of the first quarter of 2007 is:

Sales (net)	\$62,000
Cost of goods sold	<u>(37,200)</u>
Gross profit	\$24,800
Operating expenses	<u>(14,074)</u>
Pretax operating income	\$10,726

Other items	
Interest expense (bonds)	<u>(726)</u>
Income before income taxes	\$ 10,000
Income tax expense	<u>(2,000)</u>
Net income	<u>\$ 8,000</u>
Earnings per share (10,000 shares)	<u>\$.80</u>

The following is the Sikyta Company trial balance as of June 30, 2007:

	Debit	Credit
Cash	\$ 10,200	
Accounts receivable	14,700	
Allowance for doubtful accounts		\$ 400
Note receivable (due April 2, 2008)	5,000	
Inventory	29,500	
Prepaid rent (warehouse)	2,400	
Land	12,000	
Buildings	80,000	
Equipment	18,000	
Accumulated depreciation: buildings and equipment		23,000
Accounts payable		9,100
Dividends payable		3,000
Note payable (due October 1, 2007)		6,000
Bonds payable, 12% (due January 1, 2017)		25,000
Premium on bonds payable		960
Common stock, \$0.50 par		5,000
Additional paid-in capital		52,000
Retained earnings		22,968
Sales (net)		120,000
Cost of goods sold	71,420	
Operating expenses	<u>24,208</u>	
	<u>\$267,428</u>	<u>\$267,428</u>

Additional information:

- The company uses a perpetual inventory system.
- The company uses a control account for operating expenses.
- Bad debts average 0.5% of net sales.
- The company journalizes and posts adjusting entries only at the end of the year.
- On March 1, 2007, the company rented a small warehouse, paying a year's rent of \$2,400 in advance.
- The note receivable was received from a customer on April 1, 2007. The customer will pay the note plus interest of 14% on April 1, 2008.
- The buildings are being depreciated over a 25-year life, the equipment over a 10-year life. No acquisitions have been made in 2007. The company uses straight-line depreciation. Residual value is expected to be nominal and is not considered for depreciation.
- The note payable was issued on April 1, 2007. It carries an annual interest rate of 13%; interest is payable on the maturity date.
- The bonds pay interest semiannually on January 1 and July 1. Straight-line amortization of the premium is recorded at the end of each year.
- At the end of the second quarter, it estimated that the pretax income for the remaining 6 months would total \$20,000. The income tax rate schedule is 15% on the first \$20,000 of taxable income and 30% on the excess. The company rounds its estimated effective income tax rate to the nearest tenth of a percent. There is no difference between the company's pretax financial income and taxable income. Income taxes will be paid during the first quarter of 2008.
- The company declared and recorded (directly in Retained Earnings) a 30¢ per share semiannual dividend (on 10,000 shares) on June 30, 2007, payable on July 31, 2007.
- The 10,000 shares of common stock have been outstanding the entire 6 months of 2007.

Required

1. Prepare a 10-column worksheet to develop the Sikyta Company financial statements for the first 6 months of 2007 (refer to Chapter 3 for a worksheet illustration, if necessary).
2. Prepare the income statement for (a) the first 6 months of 2007 and (b) the second quarter of 2007.
3. Prepare a retained earnings statement for the first 6 months of 2007.
4. Prepare the June 30, 2007 balance sheet.

P6-5 AICPA Adapted Interim Reporting The Anderson Manufacturing Company, a California corporation listed on the Pacific Coast Stock Exchange, budgeted activities for 2007 as follows:

	Amount	Units
Net sales	\$6,000,000	1,000,000
Cost of goods sold	<u>(3,600,000)</u>	1,000,000
Gross margin	\$2,400,000	
Selling, general, and administrative expenses	<u>(1,400,000)</u>	
Operating earnings	\$1,000,000	
Nonoperating revenues and expenses	<u>0</u>	
Earnings before income taxes	\$1,000,000	
Estimated income taxes (current and deferred)	<u>(350,000)</u>	
Net earnings	<u>\$ 650,000</u>	
Earnings per share	<u>\$6.50</u>	

Anderson has operated profitably for many years and has experienced a seasonal pattern of sales volume and production similar to the following forecasted for 2007. Sales volume is expected to follow a quarterly pattern of 10%, 20%, 35%, and 35%, respectively, because of the seasonality of the industry. Also, due to production and storage capacity limitations, it is expected that production will follow a pattern of 20%, 25%, 30%, and 25%, respectively.

At the conclusion of the first quarter of 2007, the controller of Anderson has prepared and issued the following interim report for public release:

	Amount	Units
Net sales	\$ 600,000	100,000
Cost of goods sold	<u>(360,000)</u>	100,000
Gross margin	\$ 240,000	
Selling, general, and administrative expenses	<u>(275,000)</u>	
Operating loss	\$ (35,000)	
Loss from warehouse fire	<u>(175,000)</u>	
Loss before income taxes	\$(210,000)	
Estimated income taxes	<u>0</u>	
Net loss	<u>\$(210,000)</u>	
Loss per share of common stock	<u>\$(2.10)</u>	

The following additional information is available for the first quarter just completed, but was not included in the public information released:

1. The company uses a standard cost system in which standards are set at currently attainable levels on an annual basis. At the end of the first quarter, there was underapplied fixed factory overhead (volume variance) of \$50,000 that was treated as an asset at the end of the quarter. Production during the quarter was 200,000 units, of which 100,000 were sold.
2. The selling, general, and administrative expenses were budgeted on a basis of \$900,000 fixed expenses for the year plus \$0.50 variable expenses per unit of sales.
3. Assume that the warehouse fire loss met the conditions of an extraordinary loss. The warehouse had an undepreciated cost of \$320,000; \$145,000 was recovered from insurance on the warehouse. No other gains or losses are anticipated this year from similar events or transactions, nor has Anderson had any similar losses in preceding years; thus, the full loss will be deductible as an ordinary loss for income tax purposes.
4. The effective income tax rate, for federal and state taxes combined, is expected to average 35% of earnings before income taxes during 2007. There are no permanent differences between pretax financial income and taxable income.
5. Earnings per share were computed on the basis of 100,000 shares of capital stock outstanding. Anderson has only one class of stock issued, no long-term debt outstanding, and no stock option plan.

Required

1. Without reference to the specific situation described previously, what are the standards of disclosure for interim financial data (published interim financial reports) for publicly traded companies? Explain.

- Identify the weaknesses in form and content of Anderson's interim report without reference to the additional information.
- For each of the five items of additional information, indicate the preferable treatment for each item for interim reporting purposes and explain why that treatment is preferable.

P6-6 AICPA Adapted *Financial Statement Presentation and Ratios* The Horizon Company is listed on the New York Stock Exchange. The market value of its common stock was quoted at \$18 per share at both December 31, 2007 and December 31, 2006. Horizon's balance sheets at December 31, 2007 and December 31, 2006, and statements of income and retained earnings for the years then ended are as follows:

Balance Sheets

	December 31,	
	2007	2006
Assets		
Current assets		
Cash	\$ 3,500	\$ 3,600
Marketable securities, at market	13,000	11,000
Accounts receivable, net of allowance for doubtful accounts	105,000	95,000
Inventories at lower of cost or market	126,000	154,000
Prepaid expenses	<u>2,500</u>	<u>2,400</u>
Total current assets	\$250,000	\$266,000
Property, plant and equipment, net of accumulated depreciation	311,000	308,000
Other assets	<u>29,000</u>	<u>34,000</u>
Total Assets	<u>\$590,000</u>	<u>\$608,000</u>
Liabilities		
Current liabilities		
Notes payable	\$ 5,000	\$ 15,000
Accounts payable and accrued expenses	62,500	74,500
Income taxes payable	1,000	1,000
Payments due within one year on long-term debt	<u>6,500</u>	<u>7,500</u>
Total current liabilities	\$ 75,000	\$ 98,000
Long-term debt	<u>169,000</u>	<u>180,000</u>
Deferred income taxes	<u>74,000</u>	<u>67,000</u>
Other liabilities	<u>9,000</u>	<u>8,000</u>
Stockholders' Equity		
Common stock, par value \$1.00 per share; authorized 20,000 shares; issued and outstanding 10,000 shares	10,000	10,000
Additional paid-in capital	110,000	110,000
Retained earnings	142,000	134,000
Accumulated other comprehensive income		
Unrealized increase in value of marketable securities	<u>1,000</u>	<u>1,000</u>
Total stockholders' equity	<u>263,000</u>	<u>255,000</u>
Total Liabilities and Stockholders' Equity	<u>\$590,000</u>	<u>\$608,000</u>

Statement of Income and Retained Earnings

	Year Ended December 31,	
	2007	2006
Net sales	\$600,000	\$500,000
Costs and expenses		
Cost of goods sold	480,000	400,000
Selling, general and administrative expenses	74,200	68,000
Other, net	<u>17,000</u>	<u>6,000</u>
Total costs and expenses	<u>571,200</u>	<u>474,000</u>
Income before income taxes	\$ 28,800	\$ 26,000

	2007	2006
Income taxes	8,600	7,800
Net income	\$ 20,200	\$ 18,200
Retained earnings at beginning of period, as previously reported	141,000	132,000
Adjustment required for correction of an error	<u>(7,000)</u>	<u>(6,000)</u>
Retained earnings at beginning of period, as restated	\$134,000	\$126,000
Dividends on common stock	<u>12,200</u>	<u>10,200</u>
Retained earnings at end of period	<u>\$142,000</u>	<u>\$134,000</u>

Additional facts are as follows:

- "Selling, general and administrative expenses" for 2007 included a usual but infrequently occurring charge of \$9,000.
- "Other, net" for 2007 included an extraordinary item (charge) of \$10,000. If the extraordinary item (charge) had not occurred, income taxes for 2007 would have been \$11,600, instead of \$8,600.
- "Adjustment required for correction of an error" was a result of a change from an accounting principle that is not generally accepted to one that is generally accepted.
- Horizon Company has a simple capital structure and has disclosed earnings per common share for net income in the Notes to the Financial Statements.

Required

- Determine from the preceding additional facts whether or not the presentation of those facts in the Horizon Company statements of income and retained earnings is appropriate. If the presentation is appropriate, discuss the theoretical rationale for the presentation. If the presentation is not appropriate, describe the appropriate presentation and discuss its theoretical rationale. Do not discuss disclosure requirements for the notes to the financial statements.
- Describe the general significance of the following financial analysis tools: (a) quick (acid-test) ratio, (b) inventory turnover, and (c) return on stockholders' equity.
- Based on the Horizon Company balance sheets, statements of income and retained earnings, and additional facts, describe how to determine each of the above financial analysis tools (for the year 2007 only).

P6-7 AICPA Adapted Multiple-Step Income Statement Before closing the books for the year ended December 31, 2007, Pitt Corp. prepared the following condensed trial balance:

	Debit	Credit
Total assets	\$ 7,082,500	
Total liabilities		\$ 1,700,000
Common stock		1,250,000
Additional paid-in capital		2,097,500
Donated capital		90,000
Retained earnings, 1/1/07		1,650,000
Net sales		6,250,000
Cost of sales	3,750,000	
Selling and administrative expenses	1,212,500	
Interest expense	122,500	
Gain on sale of long-term investments		130,000
Income tax expense	300,000	
Loss on disposition of plant assets	225,000	
Loss due to earthquake damage	475,000	
	<u>\$13,167,500</u>	<u>\$13,167,500</u>

Other financial data for the year ended December 31, 2007:

Federal income tax

Estimated tax payments	\$200,000
Accrued	<u>\$100,000</u>
Total charged to income tax expense (Does not properly reflect current or deferred income tax expense or interperiod income tax allocation for income statement purposes.)	<u>\$300,000</u>

Pitt applied the provisions of FASB Statement No. 109, *Accounting for Income Taxes*, in its financial statements for the year ended December 31, 2007. The enacted tax rate on all types of taxable income for the current and future years is 30%. The alternative minimum tax is less than the regular income tax.

Temporary difference

Excess of book basis over tax basis in depreciable assets (arising from equipment donated as a capital contribution on December 31, 2007, and expected to be depreciated over five years beginning in 2008). There were no temporary differences prior to 2007. \$90,000

Nondeductible expenditure

Officers' life insurance expense \$70,000

Earthquake damage

This damage is considered unusual and infrequent.

Capital structure

Common stock, par value \$5 per share, traded on a national exchange:

Number of shares:

Outstanding at 1/1/07	200,000
Issued on 3/30/07 as a 10% stock dividend	20,000
Sold for \$25 per share on 6/30/07	<u>30,000</u>
Outstanding at 12/31/07	<u>250,000</u>

Required

- Using the multiple-step format, prepare a formal income statement for Pitt for the year ended December 31, 2007.
- Prepare a schedule to reconcile net income to taxable income reportable on Pitt's tax return for 2007.

P6-8 *The Coca-Cola Company Disclosures* Review the financial statements and related notes of The Coca-Cola Company in Appendix A.

Required

- What was the gross profit for 2004? The operating income?
- What was the net income for 2004? What were the related earnings per share amounts?
- What were the total assets on December 31, 2004? How much of this total were current assets?
- What were the total liabilities on December 31, 2004?
- What was the total shareowners' equity on December 31, 2004? How much was deducted from this shareowners' equity for treasury stock? What method does the company use to account for its treasury stock?
- What was the net increase in cash and cash equivalents in 2004? How much of this was from net cash provided by operating activities?
- Where does the company summarize its accounting policies? How are inventories valued and what costing methods are used? How are property, plant, and equipment depreciated?
- What is the total of the lines of credit and other short-term credit facilities available, and how much was outstanding on December 31, 2004?
- What was the net cash used in financing activities in 2004? What was the net cash used in investing activities in 2004?
- How many stock options were outstanding at December 31, 2004? What was the weighted-average price per share for exercised stock options in 2004?
- What was the net periodic pension cost of the company's pension plan in 2004? What was the fair value of the company's pension benefit plan assets on December 31, 2004?
- For the third quarter of 2004, what were the (a) net operating revenues, (b) gross profit, and (c) net income? What were the related earnings per share for (c)?
- What were the net operating revenues in Africa for 2004? What were the identifiable operating assets held in Latin America at December 31, 2004?
- Who are the auditors of the company? On what date was the audit report issued?
- What is the company's internal control over financial reporting designed to do, and how is it supported?

P6-9 Horizontal Analysis and Ratios (Appendix) The following are comparative financial statements of the Cohen Company for 2006, 2007, and 2008:

Comparative Income Statements

	For Years Ended December 31,		
	2008	2007	2006
Sales (net)	\$ 102,200	\$ 91,500	\$ 81,700
Cost of goods sold	(61,100)	(52,800)	(47,150)
Gross profit	\$ 41,100	\$ 38,700	\$ 34,550
Selling expenses	(11,400)	(10,000)	(8,900)
Administrative expenses	(8,700)	(7,843)	(6,950)
Interest expense	(3,000)	(4,000)	(4,000)
Total expenses	(23,100)	(21,843)	(19,850)
Income before income taxes	\$ 18,000	\$ 16,857	\$ 14,700
Income tax expense	(5,400)	(5,057)	(4,410)
Net income	\$ 12,600	\$ 11,800	\$ 10,290
Earnings per share	?	?	?

Comparative Retained Earnings Statements

	For Years Ended December 31,		
	2008	2007	2006
Beginning retained earnings	\$ 28,800	\$ 20,800	\$ 14,310
Add: Net income	12,600	11,800	10,290
	\$ 41,400	\$ 32,600	\$ 24,600
Less: Dividends distributed	(4,410)	(3,800)	(3,800)
Ending retained earnings	\$ 36,990	\$ 28,800	\$ 20,800

Comparative Balance Sheets

	December 31,		
	2008	2007	2006
Cash	\$ 4,200	\$ 4,000	\$ 4,100
Receivables (net)	7,600	7,000	6,200
Inventories	9,800	9,000	8,600
Noncurrent assets	119,390	112,000	107,100
Total Assets	\$140,990	\$132,000	\$126,000
Current liabilities	\$ 12,000	\$ 10,000	\$ 12,000
Bonds payable, 10%	30,000	40,000	40,000
Common stock, \$2 par	8,400	7,600	7,600
Premium on common stock	53,600	45,600	45,600
Retained earnings	36,990	28,800	20,800
Total Liabilities and Stockholders' Equity	\$140,990	\$132,000	\$126,000

Additional information: Credit sales were 65% of net sales in 2007 and 60% in 2008. At the beginning of 2008, 400 shares of common stock were issued, the first sale of stock in several years.

The Cohen Company is concerned. Although it increased the dividends paid per share by 5% in 2008 and its 2008 net income is higher than 2007 net income, the market price of its common stock dropped from \$22 per share at the beginning of 2008 to \$21 per share at year-end.

Required

- For 2006, 2007, and 2008, prepare horizontal analyses for the Cohen Company using a year-to-year approach.
- For 2007 and 2008, compute the following ratios:
 - Current
 - Acid-test
 - Inventory turnover
 - Receivables turnover

- e. Earnings per share
 - f. Dividend yield
 - g. Return on total assets
 - h. Return on stockholders' equity
 - i. Debt
3. Based on your results, discuss the possible reasons for the decrease in the market price per share in 2008.

P6-10 Vertical Analysis, Ratios (Appendix) The Pierce Company operates a high-volume retail outlet. The following are comparative financial statements for the company:

Comparative Income Statements

	<u>For Years Ended December 31,</u>	
	2008	2007
Sales (net)	\$180,000	\$150,000
Cost of goods sold	<u>(108,000)</u>	<u>(85,500)</u>
Gross profit	\$ 72,000	\$ 64,500
Selling expenses	(21,600)	(15,000)
Administrative expenses	(23,770)	(23,410)
Interest expense	<u>(3,200)</u>	<u>(2,800)</u>
Income before taxes	\$ 23,430	\$ 23,290
Income tax expense	<u>(7,030)</u>	<u>(6,990)</u>
Net income	<u>\$ 16,400</u>	<u>\$ 16,300</u>
Earnings per share (6,000 shares)	<u>\$2.73</u>	<u>\$2.72</u>

Comparative Balance Sheets

	<u>December 31,</u>	
	2008	2007
Cash	\$ 4,200	\$ 3,000
Investments (short-term)	2,000	2,100
Receivables (net)	8,600	6,400
Inventory	11,300	9,700
Noncurrent assets (net)	<u>129,900</u>	<u>118,800</u>
Total Assets	<u>\$156,000</u>	<u>\$140,000</u>
Accounts payable	\$ 12,000	\$ 10,000
Other current liabilities	1,000	2,400
Bonds payable	40,000	35,000
Common stock, \$3 par	18,000	18,000
Additional paid-in capital	30,000	30,000
Retained earnings	54,100	43,600
Accumulated other comprehensive income	<u>900</u>	<u>1,000</u>
Total Liabilities and Stockholders' Equity	<u>\$156,000</u>	<u>\$140,000</u>

Additional data: The company has not issued any common stock for several years and the price of its common stock has remained relatively constant over that time. At the beginning of 2007, it had outstanding accounts receivable (net) of \$7,600, an inventory of \$11,000, accounts payable of \$7,400, total liabilities of \$44,600, and stockholders' equity of \$85,400. The company typically makes 50% of its sales on credit.

Pierce Company management has become concerned. Although it feels that progress has been made in "tightening up" the company's operating cycle, this has caused only a modest increase in profits and no increase in the company's stock market price. Management has asked for your assistance in identifying problem areas as well as strong points.

Required

- Prepare a vertical analysis for the 2007 and 2008 financial statements of Pierce.
- Compute the following ratios for 2007 and 2008:
 - Current
 - Acid-test
 - Inventory turnover
 - Receivables turnover
 - Payables turnover
 - Return on total assets
 - Return on stockholders' equity
 - Debt
 - Interest coverage
- Briefly discuss any findings that your analyses reveal.

P6-11 Horizontal and Vertical Analyses (Appendix) The following are comparative financial statements of the Perez Company for 2006, 2007, and 2008:

Comparative Income Statements

	For Years Ended December 31,		
	2008	2007	2006
Sales	\$ 407,000	\$ 361,500	\$ 332,000
Sales returns	(7,000)	(11,500)	(12,000)
Net sales	\$ 400,000	\$ 350,000	\$ 320,000
Cost of goods sold	(244,000)	(222,000)	(205,000)
Gross profit	\$ 156,000	\$ 128,000	\$ 115,000
Selling expenses	(45,825)	(39,550)	(35,690)
Administrative expenses	(60,232)	(46,664)	(44,213)
Interest expense	(4,150)	(4,200)	(3,580)
Total expense	\$ (110,207)	\$ (90,414)	\$ (83,483)
Income before income taxes	\$ 45,793	\$ 37,586	\$ 31,517
Income tax expense	(13,738)	(11,276)	(9,455)
Net income	<u>\$ 32,055</u>	<u>\$ 26,310</u>	<u>\$ 22,062</u>
Number of common shares	10,000	9,000	8,000
Earnings per share	<u>\$3.21</u>	<u>\$2.92</u>	<u>\$2.76</u>

Comparative Balance Sheets

	December 31,		
	2008	2007	2006
Cash	\$ 15,500	\$ 12,650	\$ 9,300
Receivables (net)	11,000	9,350	6,600
Inventories	38,000	30,000	22,250
Noncurrent assets	286,500	250,000	220,350
Total Assets	<u>\$351,000</u>	<u>\$302,000</u>	<u>\$258,500</u>
Accounts payable	\$ 11,800	\$ 9,500	\$ 9,300
Notes payable	16,200	13,500	11,700
Bonds payable	38,000	39,000	36,500
Common stock, \$5 par	50,000	45,000	40,000
Premium on common stock	90,000	72,000	56,000
Retained earnings	145,000	123,000	105,000
Total Liabilities and Stockholders' Equity	<u>\$351,000</u>	<u>\$302,000</u>	<u>\$258,500</u>

Required 

On the basis of the given information:

- Prepare horizontal analyses for Perez Company using a base-year-to-date approach for 2006 through 2007, and 2006 through 2008.
- Prepare vertical analyses for the 2007 and 2008 financial statements.

P6-12 Ratio Analysis (Appendix) Comparative financial statements of the Boeckman Company for 2006 and 2007 are as follows:

Comparative Balance Sheets

	December 31,	
	2007	2006
<i>Assets</i>		
Current assets		
Cash	\$ 7,940	\$ 5,760
Temporary investments (at market)	10,060	4,240
Accounts receivable	18,000	19,500
Inventories	32,000	27,000
Prepaid insurance	<u>15,000</u>	<u>14,000</u>
Total current assets	\$ 83,000	\$ 70,500
Property and plant (net)	64,000	46,000
Investments	36,000	32,000
Long-term receivables	38,600	31,000
Patents, net	13,000	9,000
Other assets	<u>30,000</u>	<u>27,500</u>
Total Assets	<u>\$264,600</u>	<u>\$ 216,000</u>
<i>Liabilities</i>		
Current liabilities		
Accounts payable	\$ 17,800	\$ 16,500
Income taxes payable	7,500	6,800
Accrued payables	1,500	1,400
Current portion of long-term debt	<u>3,200</u>	<u>3,200</u>
Total current liabilities	\$ 30,000	\$ 27,900
Long-term debt	\$ 56,300	\$ 48,000
Deferred income taxes	12,500	11,800
Total other liabilities	<u>7,200</u>	<u>8,300</u>
Total liabilities	\$106,000	\$ 96,000
<i>Stockholders' Equity</i>		
Common stock, \$5 par	\$ 35,000	\$ 30,000
Premium on common stock	36,000	24,600
Retained earnings	86,600	\$ 64,800
Accumulated other		
comprehensive income	<u>1,000</u>	<u>600</u>
Total stockholders' equity	\$158,600	\$120,000
Total Liabilities and Stockholders' Equity	<u>\$264,600</u>	<u>\$ 216,000</u>

Comparative Income Statements

	For Years Ended December 31,	
	2007	2006
Sales	\$278,000	\$256,000
Sales returns	<u>(8,000)</u>	<u>(6,000)</u>
Net sales (68% on credit)	\$270,000	\$250,000
Cost of goods sold	<u>(175,500)</u>	<u>(170,000)</u>
Gross profit	\$ 94,500	\$ 80,000
Selling expenses	(21,500)	(18,200)
General expenses	(27,560)	(23,550)
Interest expense	<u>(4,300)</u>	<u>(3,100)</u>
Total expenses	<u>\$ (53,360)</u>	<u>\$ (44,850)</u>

	<u>For Years Ended December 31,</u>	
	<u>2007</u>	<u>2006</u>
Income before income taxes	\$ 41,140	\$ 35,150
Income tax expense	<u>(12,340)</u>	<u>(10,550)</u>
Net income	\$ 28,800	\$ 24,600
Beginning retained earnings	64,800	43,200
Common stock dividends	<u>(7,000)</u>	<u>(3,000)</u>
Ending retained earnings	<u>\$ 86,600</u>	<u>\$ 64,800</u>

Additional information: The Boeckman Company is listed on the New York Stock Exchange. It issued 1,000 additional shares of common stock at the beginning of 2007. The market value of its common stock was quoted at \$17 per share at December 31, 2007. The company uses a 365-day business year in its ratio analysis.

Required

- Based on the preceding information, compute (for the year 2007 only) the following ratios for Boeckman:
 - Dividend yield
 - Price/earnings
 - Profit margin
 - Return on total assets
 - Return on stockholders' equity
 - Current
 - Acid-test
 - Inventory turnover (in days)
 - Receivables turnover (in days)
 - Payables turnover (in days)
 - Average operating cycle (in days)
 - Debt
 - Interest coverage
 - Book value per common share
- Briefly discuss what a potential investor might do to evaluate the results of these ratios.

P6-13 AICPA Adapted Ratio Analysis (Appendix) The Printing Company is listed on the New York Stock Exchange. The market value of its common stock was quoted at \$10 per share at December 31, 2007 and 2006. Printing's balance sheet at December 31, 2007 and 2006, and statement of income and retained earnings for the years then ended are as follows:

Balance Sheet

	<u>December 31,</u>	
	<u>2007</u>	<u>2006</u>
Assets		
Current Assets		
Cash	\$ 3,500,000	\$ 3,600,000
Marketable securities, at market	13,000,000	11,000,000
Accounts receivable (net)	105,000,000	95,000,000
Inventories, lower of cost or market	126,000,000	154,000,000
Prepaid expenses	<u>2,500,000</u>	<u>2,400,000</u>
Total current assets	\$250,000,000	\$266,000,000
Property and plant (net)	311,000,000	308,000,000
Investments, at equity	2,000,000	3,000,000
Long-term receivables	14,000,000	16,000,000
Goodwill and patents (net)	6,000,000	6,500,000
Other assets	<u>6,000,000</u>	<u>7,600,000</u>
Total Assets	<u>\$589,000,000</u>	<u>\$ 607,100,000</u>

	2007	2006
Liabilities		
Current Liabilities		
Notes payable	\$ 5,000,000	\$ 15,000,000
Accounts payable	38,000,000	48,000,000
Accrued expenses	24,500,000	27,000,000
Income taxes payable	1,000,000	1,000,000
Current portion of long-term debt	<u>6,500,000</u>	<u>7,000,000</u>
Total current liabilities	<u>75,000,000</u>	<u>98,000,000</u>
Long-term debt	<u>169,000,000</u>	<u>180,000,000</u>
Deferred income taxes	<u>74,000,000</u>	<u>67,000,000</u>
Other liabilities	<u>9,000,000</u>	<u>8,000,000</u>
Stockholders' Equity		
Common stock, \$1 par value	10,000,000	10,000,000
5% cumulative preferred stock, \$100 par value; \$100 liquidating value	4,000,000	4,000,000
Additional paid-in capital	107,000,000	107,000,000
Retained earnings	142,000,000	134,000,000
Accumulated other comprehensive loss		
Unrealized decrease in value of marketable securities	<u>(1,000,000)</u>	<u>(900,000)</u>
Total stockholders' equity	<u>262,000,000</u>	<u>254,100,000</u>
Total Liabilities and Stockholders' Equity	<u>\$589,000,000</u>	<u>\$ 607,100,000</u>

Statement of Income and Retained Earnings

	Year Ended December 31,	
	2007	2006
Net sales	\$600,000,000	\$500,000,000
Costs and expenses		
Cost of goods sold	\$490,000,000	\$400,000,000
Selling and general expenses	71,900,000	66,000,000
Other, net	<u>7,000,000</u>	<u>6,000,000</u>
Total costs and expenses	568,900,000	472,000,000
Income before taxes	\$ 31,100,000	\$ 28,000,000
Income tax expense	<u>10,900,000</u>	<u>9,800,000</u>
Net income	\$ 20,200,000	\$ 18,200,000
Beginning retained earnings	134,000,000	126,000,000
Dividends on common stock	12,000,000	10,000,000
Dividends on preferred stock	<u>200,000</u>	<u>200,000</u>
Ending retained earnings	<u>\$142,000,000</u>	<u>\$134,000,000</u>

Required

Based on the preceding information, compute (for the year 2007 only) the following:

- Current (working capital) ratio
- Quick (acid-test) ratio
- Number of days' sales in average receivables, assuming a business year consists of 300 days and all sales are on account
- Inventory turnover
- Book value per share of common stock
- Earnings per share on common stock
- Price/earnings ratio on common stock
- Dividend yield ratio on common stock

CASES

COMMUNICATION

C6-1 Auditor's Report

Meyer Company is considering being audited for the first time. Mary Thomas, its president, has asked your advice. She says: "I understand that after an audit the certified public accountant issues a report that expresses some opinions, and that one type of report is 'unqualified.' What exactly is involved in an audit, what opinions does the auditor express, and what paragraphs are included in an unqualified audit report?"

Required

Prepare a written response to the president of Meyer Company.

C6-2 Management's Report

CMA Adapted The subject of management reports has been prominent the past few years. A *management report* is included in the annual report to shareholders. This report should not be confused with management's discussion and analysis of operations and financial condition that also is relatively new to the annual report.

The management report is included in the annual report to shareholders as a result of the urging of a number of groups and organizations. Consequently, the form and content of the annual report to shareholders continues to evolve as management attempts to present additional information that will be useful to the readers.

Required

1. Explain the general purposes of the management report.
2. Identify five subject areas or topics which have been recommended for inclusion in the management report.
3. Explain why the content of the management report influences the activities of the external auditor during the audit engagement?

C6-3 Securities and Exchange Commission

CMA Adapted The U.S. Securities and Exchange Commission (SEC) was created in 1934 and consists of five commissioners and a staff of approximately 1,900. The SEC professional staff is organized into four divisions and several principal offices. The primary objectives of the SEC are to

support fair securities markets and to foster enlightened shareholder participation in major corporate decisions. The SEC has a significant presence in financial markets and corporation-shareholder relations and has the authority to exert significant influence on entities whose actions lie within the scope of its authority. The SEC chairman has identified enforcement cases and full disclosure filings as major activities of the SEC.

Required

1. The SEC must have some "license" to exercise power. Explain where the SEC receives its authority.
2. Explain, in general, the major ways in which the SEC:
 - a. Supports fair securities markets.
 - b. Fosters enlightened shareholder participation in major corporate decisions.
3. The major responsibilities of the SEC's Division of Corporation Finance include full disclosure filings. Describe the means by which the SEC attempts to assure the material accuracy and completeness of registrants' financial disclosure filings.

C6-4 Segment Reporting

To understand current generally accepted accounting principles with respect to accounting for and reporting on the operating segments of a company, as stated in *FASB Statement No. 131*, it is necessary to be familiar with certain terminology. Furthermore, central issues in reporting on operating segments of a company are the determination of which segments are reportable, and what is to be reported.

Required

1. Explain what is meant by an operating segment of a company.
2. What are the tests to determine whether or not an operating segment is reportable?
3. Briefly identify the information that a company must disclose in regard to its reportable operating segments.

C6-5 Interim Reporting

AICPA Adapted Interim financial reporting has become an important topic in accounting. There has been considerable discussion as to the proper method of reflecting

results of operations at interim dates. Accordingly, the Accounting Principles Board issued an opinion clarifying some aspects of interim financial reporting.

Required

1. Explain generally how revenue should be recognized at interim dates and specifically how revenue should be recognized for industries subject to large seasonal fluctuations

in revenue and for long-term contracts using the percentage-of-completion method at annual reporting dates.

2. Explain generally how product and period costs should be recognized at interim dates. Also discuss how inventory and cost of goods sold may be afforded special accounting treatment at interim dates.
3. Explain how the provision for income taxes is computed and reflected in interim financial statements.

CREATIVE AND CRITICAL THINKING

C6-6 Segment Reporting

AICPA Adapted Many accountants and financial analysts contend that a company should report financial data for operating segments of the enterprise.

Required

1. Explain what financial reporting for the operating segments of a business enterprise involves.
2. Identify the reasons for requiring financial data to be reported by operating segments.
3. Identify the possible disadvantages of requiring financial data to be reported by operating segments.

C6-7 Interim Reporting

AICPA Adapted The unaudited quarterly statements of income issued by many corporations to their stockholders usually are prepared on the same basis as annual statements, the statement for each quarter reflecting the transactions of that quarter.

Required

1. Why do problems arise in using such quarterly statements to predict the income (before extraordinary items) for the year? Explain.
2. Discuss the ways in which quarterly income can be affected by the behavior of the costs recorded in a Repairs and Maintenance of Factory Machinery account.
3. Do such quarterly statements give management opportunities to manipulate the results of operations for a quarter? Explain your answer.

C6-8 Analyzing Coca-Cola's Segment and Interim Reporting

Refer to the financial statements and related notes of The Coca-Cola Company in Appendix A of this book.

Required

1. What are the company's operating segments?

2. What items are subtracted from an operating segment's net operating revenues to determine its profit or loss?
3. What does the North America operating segment include and what was its operating income for 2004?
4. What were the net operating revenues of the Latin America operating segment for 2004? What was the total amount of the net operating revenues of the various operating segments for 2004? How does this amount compare to the net operating revenues reported on the company's consolidated statement of income for 2004?
5. What was the depreciation and amortization of the Asia operating segment for 2004? What was the total amount of the depreciation and amortization of the various operating segments for 2004? How does this amount compare to the depreciation and amortization reported on the company's consolidated statement of cash flows for 2004?
6. What were the company's net operating revenues for the first quarter of 2004? How does this amount compare to the third quarter of 2004?
7. What was the company's gross profit for the second quarter of 2004? How does this amount compare to the second quarter of 2003?
8. What was the company's basic net income per share for the third quarter of 2004? What was the company's full-year net income per share for 2004? How does this amount compare to the basic net income per share reported on the company's consolidated statement of income for 2004?



C6-9 Ethics and Quarterly Expenses

It is March 2008, and you have just been hired by the Tallas Company to be its accountant. Tallas is a small corporation that does a seasonal business of selling snow removal equipment, with most of its sales to retailers occurring in the last two quarters of the calendar year. Production is particularly heavy during the second quarter, in preparation for these sales. During the first quarter production

is slowest, so this is when Tallas does the majority of its repairs and maintenance on its production equipment.

You are in the process of preparing Tallas Company's 2008 first quarter interim report. After preparing a preliminary income statement, which shows a modest \$30,000 profit, you begin to prepare a preliminary balance sheet. In reviewing the asset accounts in the general ledger, you notice an account entitled Miscellaneous Factory Assets in the amount of \$140,000. Since this is a large amount relative to the other assets and you are unclear how to classify this asset, you ask the controller for an explanation. The controller replies, "Oh that. Just include it under Property, Plant, and Equipment. That is the amount we spent on repairs and maintenance during the first quarter. If we expensed all of it

now, we would show a loss for the first quarter. Instead, we record the amount as an asset, wait to see how the second quarter results are, and then expense some of it so we can show a reasonable profit. The remainder we expense during our busy season of the third and fourth quarters. We have been doing this for years. It makes all of our quarterly income statements look better. Besides, it makes no difference, since our total yearly income is the same regardless of when we report repairs and maintenance expense during the four quarters."

Required

From financial reporting and ethical perspectives, when do you think Tallas Company should report its quarterly repairs and maintenance expense?