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Careers in Accounting

Accountants as Financial Analysts

More than ever before, accounting students are being hired directly into positions as financial analysts, where they find themselves analyzing the operations of companies, assessing their value, and making predictions about future performance. The goal of the financial analyst is to understand the current value of a company and use that knowledge to make predictions about future performance. To achieve this goal, financial analysts rely heavily on financial statements as a source of information. Since financial statements are prepared by accountants, it is no surprise that accountants are being hired for purposes of interpreting financial information and making predictions. It seems that the expertise accountants have in preparing financial statements translates well into financial analysis skills.

Many other accountants are also finding themselves in the position of acting as financial analysts. Management accountants, internal auditors, and external auditors all rely heavily on financial analysis skills in their positions. Each of these groups is interested in using tools such as horizontal analysis, vertical analysis, and ratio analysis to better understand a company and how its financial performance compares to industry standards, major competitors, prior year results, budgets, and other expectations. Unusual relationships and results can then be highlighted and investigated where appropriate. For instance, auditors find financial analysis techniques critically important in audit planning and testing. Further, analytical techniques are also important in detecting fraud. Similarly, a management accountant in a hotel may be interested in evaluating why some of its operating ratios such as REVPAR (revenue per available room) deteriorated while those of a close competitor increased in the same time frame.

Given the complexity of business organizations and business transactions in today's global marketplace, accountants are increasingly finding that their job responsibilities have expanded to include financial statement interpretation and analysis in addition to other skills. Management accountants in particular are finding themselves more frequently in advisory positions including as part of the executive teams involved in strategic planning for the company. To better handle these responsibilities, management accountants must have strong financial analysis skills.

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12

Analysis and Interpretation of Financial Statements

The two primary objectives of every business are solvency and profitability. Solvency is the ability of a company to pay debts as they come due; it is reflected on the company's balance sheet. Profitability is the ability of a company to generate income; it is reflected on the company's income statement. Generally, all those interested in the affairs of a company are especially interested in solvency and profitability.

This chapter discusses several common methods of analyzing and relating the data in financial statements and, as a result, gaining a clear picture of the solvency and profitability of a company. Internally, management accountants and managers analyze a company's financial statements as do external investors, creditors, and regulatory agencies. Although these users have different immediate goals, their overall objective in financial statement analysis is the same—to make predictions about an organization as an aid in decision making.

Learning Objectives

After studying this chapter, you should be able to:

1. Describe and explain the objectives of financial statement analysis.
2. Describe the sources of information for financial statement analysis.
3. Calculate and explain changes in financial statements using horizontal analysis, vertical analysis, and trend analysis.
4. Perform ratio analysis on financial statements using liquidity ratios, long-term solvency ratios, profitability tests, and market tests.
5. Describe the considerations used in financial statement analysis.

Objectives of Financial Statement Analysis

Management accountant's analysis of financial statements primarily relates to parts of the company. Using this analysis, management can plan, organize, direct, and control operations within the company. Management obtains any information it wants about the company's operations by requesting special-purpose reports. It uses this information to make difficult decisions, such as which employees to lay off and when to expand operations.

In preparing these special reports, management accountants rely in part on the general-purpose financial statements. Quite often the special reports contain information including the analysis and interpretation of the financial statements using the ratios and other analytical tools described in this chapter. These ratios and tools help to emphasize relationships among the data contained in the financial statements and may reveal problem areas that should be addressed. Financial statement analysis is helpful both in evaluating the past and predicting the future financial health of the company

Objective 1
Describe and explain the objectives of financial statement analysis.

Users of financial statements need to pay particular attention to the explanatory notes, or the financial review, provided by management in annual reports. This integral part of the annual report provides insight into the scope of the business, the results of operations, liquidity and capital resources, new accounting standards, and geographic area data. Moreover, this section provides an economic outlook that an analyst may find very helpful when considering the possible future profitability of the company.

Financial Statement Analysis

Financial statement analysis consists of applying analytical tools and techniques to financial statements and other relevant data to obtain useful information. This information reveals significant relationships between data and trends in those data that assess the company's past performance and current financial position. The information shows the results or consequences of prior management decisions. In addition to management accountants using this information to prepare special reports for management, others inside and outside the company use the information as suggested below.

Present and potential investors are interested in the future ability of a company to earn profits—its profitability. These investors wish to predict future dividends and changes in the market price of the company's common stock. Since both dividends and price changes are likely to be influenced by earnings, investors may predict earnings. The company's past earnings record is the logical starting point in predicting future earnings.

Some outside parties, such as creditors, are more interested in predicting a company's solvency than its profitability. The **liquidity** of the company affects its short-term solvency. The company's liquidity is its state of possessing liquid assets, such as cash and other assets easily converted to cash. Because companies must pay short-term debts soon, liquid assets must be available for their payment. For example, a bank asked to extend a 90-day loan to a company would want to know the company's projected short-term liquidity. Of course, the company's predicted ability to repay the 90-day loan is likely to be based at least partially on its past ability to pay off debts.

Long-term creditors are interested in a company's long-term solvency, which is usually determined by the relationship of a company's assets to its liabilities. Generally, we consider a company to be solvent when its assets exceed its liabilities so that the company has a positive stockholders' equity. The larger the assets are in relation to the liabilities, the greater the long-term solvency of the company. Thus, the company's assets could shrink significantly before its liabilities would exceed its assets and destroy the company's solvency.

Investors perform several types of analyses on a company's financial statements. All of these analyses rely on comparisons or relationships of data that enhance the utility or practical value of accounting information. For example, knowing that a company's net income last year was $100,000 may or may not, by itself, be useful information. Some usefulness is added when we know that the prior year's net income was $25,000. And even more useful information is gained if we know the amounts of sales and assets of the company. Such comparisons or relationships may be expressed as:

1. Absolute increases and decreases for an item from one period to the next.
2. Percentage increases and decreases for an item from one period to the next.
3. Percentages of single items to an aggregate total.
4. Trend percentages.
5. Ratios.

In this chapter we apply all of these techniques in analyzing Synotech, Inc.'s performance. This was the company introduced in Chapter 11.

Items 1 and 2 make use of comparative financial statements. **Comparative financial statements** present the same company's financial statements for one or two successive periods in side-by-side columns. The calculation of dollar changes or percentage changes in the statement items or totals is **horizontal analysis.** This analysis detects changes in a company's performance and highlights trends.

Analysts also use vertical analysis of a single financial statement, such as an income statement. **Vertical analysis** (item 3) consists of the study of a single financial statement in which each item is expressed as a *percentage of a significant total.* Vertical analysis is especially helpful in analyzing income statement data such as the percentage of cost of goods sold to sales.

Financial statements that show only percentages and no absolute dollar amounts are **common-size statements.** All percentage figures in a common-size balance sheet are percentages of total assets while all the items in a common-size income statement are percentages of net sales. The use of common-size statements facilitates vertical analysis of a company's financial statements.

Trend percentages (item 4) are similar to horizontal analysis except that comparisons are made to a selected base year or period. Trend percentages are useful for comparing financial statements over several years because they disclose changes and trends occurring through time.

Ratios (item 5) are expressions of logical relationships between items in the financial statements of a single period. Analysts can compute many ratios from the same set of financial statements. A ratio can show a relationship between two items on the same financial statement or between two items on different financial statements (e.g., balance sheet and income statement). The only limiting factor in choosing ratios is the requirement that the items used to construct a ratio have a logical relationship to one another.

Sources of Information

Financial information about publicly owned corporations can come from different sources such as published reports, government reports, financial service information, business publications, newspapers, and periodicals.

Published Reports

Objective 2
Describe the sources of information for financial statement analysis.

Public corporations must publish annual financial reports. The Annual Report Appendix gives such data for The Limited, Inc.. The major sections of an annual report are (not necessarily in this order):

1. Consolidated financial statements Consolidated financial statements include a balance sheet containing two years of comparative data; an income statement containing three years of comparative data; a statement of cash flows containing three years of comparative data; and a statement of shareholders' equity containing three years of comparative data. For examples of each statement, refer to the annual report booklet.

2. Notes to consolidated financial statements Notes to consolidated financial statements provide an in-depth look into the numbers contained in the financial statements. The notes usually contain sections on significant accounting policies, long-term debt, leases, stock option plans, etc. These explanations allow stockholders to look beyond the numbers to the events that triggered the dollar amounts recorded in the financial statements.

3. Letters to stockholders Most annual reports are introduced with a letter to the stockholders. The letter often includes information about the company's past history, its mission, current year operating results, and the company's future goals. In the 2000

Lucent Technologies
Lucent Technologies is a supplier of communication systems, software and products.

letter to shareholders, management of Lucent Technologies had to explain the company's poor performance and indicate that the future would be brighter.

This was a tough year for Lucent Technologies. While a number of factors contributed to the company's financial performance in fiscal year 2000, clearly, missing a major growth opportunity in the optical networking market with our OC-192 product was a big setback. As a result, we saw less-than-expected revenues and lower gross margins in our optical networking business which makes the high-speed networks that help service providers move phone calls, video, e-mail messages, Web pages and other data around the world on beams of laser light.

We also saw a greater-than-anticipated decline in circuit switching sales and margins, which was not offset by growth in other areas of the business.

In addition, we had other issues of execution and focus. In late October, the Lucent board of directors concluded that a different set of skills was needed to address the company's challenges. I agreed to assume the duties of chairman and chief executive officer and to work to address those challenges.

As I have said to the people of Lucent, this is a time to look forward, not back. Lucent is blessed with a great many strengths and opportunities.

Our strengths include world-class technology, industry-leading products and services, deep customer relationships and the best people in the industry.

The marketplace is rich with opportunities that play directly to our strengths. The issues we face are ones of execution and focus, and they are fixable.

We view 2001 as a transition year, a year for us to fix our business and position it for long-term growth.

4. **Reports of independent accountants** The Securities and Exchange Commission (SEC) requires the financial statements of certain companies to be audited. The report of independent accountants, found at the end of the financial statements, provides assurance that the financial statements prepared by the company have been audited and are free of material misstatements. The report also may include a paragraph highlighting the significant accounting policies that the company has changed recently.

5. **Management discussion and analysis** The management discussion and analysis section of the annual report provides management's view of the performance of the company. The analysis is based on the financial statements, the conditions of the industry, and ratios.

Government Reports

Publicly held companies must file detailed annual reports (Form 10–K), quarterly reports (Form 10–Q), and special events reports (Form 8–K) with the Securities and Exchange Commission. These reports are available to the public for a small charge and sometimes contain more detailed information than the published reports.

Financial Service Information, Business Publications, Newspapers, and Periodicals

Financial statement information is often more meaningful when users compare it with industry norms. Two firms that provide information on individual companies and industries are Moody's Investors Service and Standard & Poor's. Dun & Bradstreet Companies, Inc., publishes *Key Business Ratios* and Robert Morris Associates publishes *Annual Statement Studies;* both provide information for specific industries. Standard & Poor's *Industry Surveys* contains background descriptions and the economic outlook for different industries.

Business publications such as *The Wall Street Journal, Barron's, Forbes,* and *Fortune* also report industry financial news. Because financial statement users must be knowledgeable about current developments in business, the information in financial newspapers and periodicals is very valuable to them.

Horizontal Analysis and Vertical Analysis: an Illustration

Objective 3
Calculate and explain changes in financial statements using horizontal analysis, vertical analysis, and trend analysis.

The comparative financial statements of Synotech, Inc., will serve as a basis for an example of horizontal analysis and vertical analysis of a balance sheet and a statement of income and retained earnings. Recall that horizontal analysis calculates changes in comparative statement items or totals, whereas vertical analysis consists of a comparison of items on a single financial statement.

Analysis of a Balance Sheet

Imagine that you are a management accountant who has just been hired by Synotech, Inc. You have acquired its 2007 Annual Report and want to learn more about the company by performing some horizontal and vertical analyses of the financial statements.

First, we begin with the balance sheets. Illustration 12.1 on page 370 shows the comparative balance sheets for 2007 and 2006 in Columns (1) and (2). Take a few minutes to study the balance sheets. Then review Columns (3) and (4), which show the horizontal analysis that would be performed on the comparative balance sheets.

Column (3) shows the change that occurred in each item between December 31, 2006, and December 31, 2007. If the change between the two dates is an increase from 2006 to 2007, the change is a positive figure. If the change is a decrease, the change is a negative figure and is shown in parentheses. Column (4) shows the percentage change in each item. You can calculate the percentage change by dividing the dollar change by the dollar balance of the earlier year (2006). While examining the horizontal analysis in Illustration 12.1 note that:

1. Total current assets have increased $14.3 million, consisting largely of increases in cash, marketable securities, and other current assets despite a $63.0 million decrease in net receivables, while total current liabilities have increased $181.4 million, largely as a result of increases in the current portion of long-term debt and other accruals.
2. Total liabilities have decreased $114.1 million, while total assets increased by $311.0 million.

Next, study Column (4), which expresses as a percentage the dollar change in Column (3). Frequently, these percentage increases are more informative than absolute amounts, as illustrated by the current asset and current liability changes. Although the absolute amount of current liabilities has increased tremendously over the amount of current assets, the percentages reveal that current assets increased .5%, while current liabilities increased 8.6%. Thus, current liabilities are increasing at a faster rate than current assets. Current assets still exceed current liabilities. This fact indicates that the company will be able to pay its debts as they come due.

Studying the percentages in Column (4) could lead to several other observations. For instance, the 6.9% decrease in long-term debt indicates that interest charges will be lower in the future, having a positive effect on future net income. The 14.2% increase in retained earnings could be a sign of increased dividends in the future; in addition, the increase in cash of 19% could support this conclusion.

Now examine Columns (5) and (6) to see the vertical analysis that would be performed. A vertical analysis of the company's balance sheet discloses each account's significance to total assets or total equities. This comparison aids in assessing the importance of the changes in each account. Columns (5) and (6) in Illustration 12.1 express the dollar amount of each item in Columns (1) and (2) as a percentage of total assets or equities. For example, although other assets declined $6.3 million in 2007, the decrease of 1.4% in the account represents only approximately 4.8% of total assets and, therefore, probably does not have great significance. Vertical analysis also shows that total debt financing decreased from 78.0% of total equities (liabilities and stockholders' equity) in 2006, to 74.3% in 2007. At the same time, the percentage of stockholder financing to total assets of the company increased from 22.0% to 25.7%.

Illustration 12.1 Comparative Balance Sheets

SYNOTECH, INC.
Comparative Balance Sheets
December 31, 2007, and 2006
($ millions)

			Horizontal Analysis		Vertical Analysis	
	December 31		Increase or (Decrease) 2007 over 2006		Percent of Total Assets	
	(1) 2007	(2) 2006	(3) Dollars*	(4) Percent*	(5) 2007	(6) 2006
Assets						
Current Assets						
Cash and cash equivalents	$ 298.0	$ 250.5	$47.5	19.0%	3.1 %	2.7 %
Marketable securities	71.3	57.5	13.8	24.0	0.8	0.6
Receivables, net	1,277.3	1,340.3	(63.0)	(4.7)	13.5	14.6
Inventories	924.8	929.8	(5.0)	(0.5)	9.8	10.1
Other current assets	275.3	254.3	21.0	8.3	2.9	2.8
Total current assets	$2,846.7	$2,832.4	$14.3	0.5	30.0	30.9
Property, plant and equipment, net	2,914.7	2,586.2	328.5	12.7	30.7	28.2
Goodwill and other intangibles, net	3,264.5	3,290.0	(25.5)	(0.8)	34.4	35.9
Other assets	455.9	462.2	(6.3)	(1.4)	4.8	5.0
Total assets	$9,481.8	$9,170.8	$311.0	3.4	100.0	100.0
Liabilities and Shareholders' Equity						
Current Liabilities						
Notes and loans payable	$ 206.8	$ 245.3	$ (38.5)	(15.7)	2.2	2.7
Current portion of long-term debt	132.5	44.4	88.1	198.4	1.4	0.5
Accounts payable	902.0	886.4	15.6	1.8	9.5	9.7
Accrued income taxes	111.7	92.1	19.6	21.3	1.2	1.0
Other accruals	932.2	835.6	96.6	11.6	9.8	9.1
Total current liabilities	$2,285.2	$2,103.8	$181.4	8.6	24.1	22.9
Long-term debt	3,344.2	3.590.4	(246.2)	(6.9)	35.3	39.2
Deferred income taxes	281.2	284.8	(3.6)	(1.3)	3.0	3.1
Other liabilities	1,130.4	1,176.1	(45.7)	(3.9)	11.9	12.8
Total liabilities	$7,041.0	$7,155.1	$(114.1)	(1.6)	74.3	78.0
Shareholders' Equity						
Preferred stock	$ 471.2	$ 484.2	$ (13.0)	(2.7)	5.0	5.3
Common stock, $1.20 par value (500,000,000 shares authorized, 183,213,295 shares issued)	219.9	219.9	0.0	0.0	2.3	2.4
Additional paid-in capital	1,321.9	1,240.4	81.5	6.6	13.9	13.5
Retained earnings	3,277.1	2,870.6	406.5	14.2	34.6	31.3
Cumulative translation adjustments	(641.6)	(615.6)	(26.0)	4.2	-6.8	-6.7
	$4,648.5	$4,199.5	$449.0	10.7	49.0	45.8
Unearned compensation	(445.1)	(453.6)	8.5	(1.9)	-4.7	-4.9
Treasury stock, at cost	(1,762.6)	(1,730.2)	(32.4)	1.9	-18.6	-18.9
Total shareholders' equity	$2,440.8	$2,015.7	$425.1	21.1	25.7	22.0
Total liabilities and stockholders equity	$9,481.8	$9,170.8	$311.0	3.4	100.0	100.0

*Dollars = (1) — (2); Percent = (3)/(2)

Analysis of Statement of Income and Retained Earnings

Illustration 12.2 provides the information needed to analyze Synotech's comparative statements of income and retained earnings. Such a statement merely combines the income statement and the statement of retained earnings. Columns (7) and (8) in Illustration 12.2 show the dollar amounts for the years 2007 and 2006, respectively. Study these statements for a few minutes. Then examine Columns (9) and (10) which show the horizontal analysis that would be performed on the company's comparative

Illustration 12.2 Comparative Statements of Income and Retained Earnings

SYNOTECH, INC.
Comparative Statements of Income and Retained Earnings
For the years ended December 31, 2007, and 2006
($ millions)

	Year Ended, December 31		Horizontal Analysis: Increase or (Decrease) 2007 over 2006		Vertical Analysis: Percent of Net Sales	
	(7)	(8)	(9)	(10)	(11)	(12)
	2007	2006	Dollars*	Percent*	2007	2006
Net Sales	$10,498.8	$10,029.8	$469.0	4.7%	100.0 %	100.0 %
Cost of goods sold	5,341.3	5,223.7	117.6	2.3	50.9	52.1
Gross Profit	$5,157.5	$4,806.1	$351.4	7.3	49.1	47.9
Selling, general and administrative expenses	3,662.5	3,455.5	207.0	6.0	34.9	34.5
Provision for restructured operations	—	552.6	(552.6)	(100.0)	0.0	
						5.5
Other expense, net	112.6	115.3	(2.7)	(2.3)	1.1	
						1.1
Interest expense, net of interest income of $41.2 and $36.7, respectively	236.9	246.5	(9.6)	(3.9)	2.3	2.5
Income before income taxes	$1,145.5	$436.2	$709.3	162.6	10.9	4.3
Provision for income taxes	383.5	229.8	153.7	66.9	3.7	2.3
Net income	$762.0	$206.4	$555.6	269.2	7.3	2.1
Retained earnings, January 1	2,870.6	2,996.0	(125.4)	(4.2)		
Total	$3,632.6	$3,202.4	$430.2	13.4		
Dividends declared:						
Series B Convertible Preference Stock, net of income taxes	25.1	25.3	(0.2)	(0.8)		
Preferred stock	0.6	0.6	0.0	0.0		
Common stock	329.8	305.9	23.9	7.8		
Retained Earnings, December 31	$3,277.1	$2,870.6	$406.5	14.2		

*Dollars = (7) - (8); Percent = (9)/(8)

statements of income and retained earnings. Columns (9) and (10) show the absolute and percentage increase or decrease in each item from 2006 to 2007. The absolute change is determined by deducting the 2006 amount from the 2007 amount. If the change between two dates is an increase from 2006 to 2007, the change is a positive figure. If the change is a decrease, the change is a negative figure and is shown in parentheses. You calculate the percentage change by dividing the dollar change by the dollar amount for 2006.

The horizontal analysis shows that sales increased a total of $469.0 million, an increase of 4.7%. Since cost of goods sold increased by a much smaller amount ($117.6 million), gross profit increased by $351.4, or 7.3%. The $552.6 million expense in 2006 was the result of a provision for restructured operations. Although this is not a recurring expense, it does not classify as an extraordinary expense and is treated as part of income from continuing operations.

Now look at Columns (11) and (12) to see the vertical analysis that would be performed. Columns (11) and (12) express the dollar amount of each item in Columns (7) and (8) as a percentage of net sales. Even though cost of goods sold increased in 2007, it remained a fairly constant percentage of net sales. Therefore, gross profit as a percentage of net sales increased only slightly. The percentage of expenses to net sales decreased somewhat, thus yielding an increase in income before income taxes as a percentage of net sales.

Reinforcing Problems
E12–1 Perform horizontal and vertical analysis.
P12–1 Perform horizontal and vertical analysis and comment on the results.
P12–1A Perform horizontal and vertical analysis and comment on the results.

Having completed the horizontal analysis and vertical analysis of Synotech's balance sheet and statement of income and retained earnings, you are ready to study trend percentages and ratio analysis. The last section in this chapter discusses some final considerations in financial statement analysis. Professional financial statement analysts use several tools and techniques to determine the solvency and profitability of companies.

Trend Percentages

Trend percentages, also referred to as *index numbers,* help you to compare financial information over time to a base year or period. You can calculate trend percentages by:

1. Selecting a base year or period.
2. Assigning a weight of 100% to the amounts appearing on the base-year financial statements.
3. Expressing the corresponding amounts on the other years' financial statements as a percentage of base-year or period amounts. Compute the percentages by dividing nonbase-year amounts by the corresponding base-year amounts and then multiplying the result by 100.

The following information for Synotech illustrates the calculation of trend percentages:

($ millions)	**2005**	**2006**	**2007**
Net Sales	$ 9,105.5	$10,029.8	$10,498.8
Cost of goods sold	4,696.0	5,223.7	5,341.3
Gross profit	$ 4,409.5	$ 4,806.1	$ 5,157.5
Operating expenses	3,353.6	4,369.9	4,012.0
Income before income taxes	$ 1,055.9	$ 436.2	$ 1,145.5

If 2005 is the base year, to calculate trend percentages for each year divide net sales by $9,105.5 million; cost of goods sold by $4,696.0 million; gross profit by $4,409.5 million; operating expenses by $3,353.6 million; and income before income taxes by $1,055.9 million. After all divisions have been made, multiply each result by 100. The resulting percentages reflect trends as follows:

	2005	**2006**	**2007**
Net sales	100.0%	119.2%	115.3%
Cost of goods sold	100.0	111.2	113.7
Gross profit	100.0	109.0	117.0
Operating expenses	100.0	130.3	119.6
Income before income taxes	100.0	41.3	108.5

Real World Example
Callaway Golf Company reported net incomes of $55,322,000 in 1999 and $80,999,000 in 2000. If 1999 was the base of 100%, then 2000 was 146%.

These trend percentages indicate the changes taking place in the organization and highlight the direction of these changes. For instance, the percentage of sales is increasing each year compared to the base year. Cost of goods sold increased at a lower rate than net sales in 2005 and 2007, causing gross profit to increase at a higher rate than net sales. Operating expenses in 2006 increased due to the provision for restructured operations, causing a significant decrease in income before income taxes. Percentages provide clues to an analyst about which items need further investigation or analysis. In reviewing trend percentages, a financial statement user should pay close attention to the trends in related items, such as the cost of goods sold in relation to sales. Trend analysis that shows a constantly declining gross margin (profit) rate may be a signal that future net income will decrease.

As useful as trend percentages are, they have one drawback. Expressing changes as percentages is usually straightforward as long as the amount in the base year or period is positive—that is, not zero or negative. Analysts cannot express a $30,000 increase in notes receivable as a percentage if the increase is from zero last year to $30,000 this year. Nor can they express an increase from a loss last year of $10,000 to income this year of $20,000 in percentage terms.

Proper analysis does not stop with the calculation of increases and decreases in amounts or percentages over several years. Such changes generally indicate areas worthy of further investigation and are merely clues that may lead to significant findings. Accurate predictions depend on many factors, including economic and political conditions; management's plans regarding new products, plant expansion, and promotional outlays; and the expected activities of competitors. Considering these factors along with horizontal analysis, vertical analysis, and trend analysis should provide a reasonable basis for predicting future performance.

Reinforcing Problems
P12–2 Perform trend analysis and comment on the results.
P12–2A Perform trend analysis and comment on the results.

Ratio Analysis

Logical relationships exist between certain accounts or items in a company's financial statements. These accounts may appear on the same statement or on two different statements. We set up the dollar amounts of the related accounts or items in fraction form called *ratios*. These ratios include: (1) liquidity ratios; (2) equity, or long-term solvency, ratios; (3) profitability tests; and (4) market tests.

Objective 4
Perform ratio analysis on financial statements using liquidity ratios, long-term solvency ratios, profitability tests, and market tests.

Liquidity Ratios

Liquidity ratios indicate a company's short-term debt-paying ability. Thus, these ratios show interested parties the company's capacity to meet maturing current liabilities.

Current (or Working Capital) Ratio Working capital is the excess of current assets over current liabilities. The ratio that relates current assets to current liabilities is the **current (or working capital) ratio.** The current ratio indicates the ability of a company to pay its current liabilities from current assets and, thus, shows the strength of the company's working capital position.

You can compute the current ratio by dividing current assets by current liabilities:

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

The ratio is usually stated as a number of dollars of current assets to one dollar of current liabilities (although the dollar signs usually are omitted). Thus, for Synotech in 2007, when current assets totaled $2,846.7 million and current liabilities totaled $2,285.2 million, the ratio is 1.25:1, meaning that the company has $1.25 of current assets for each $1.00 of current liabilities.

The current ratio provides a better index of a company's ability to pay current debts than does the absolute amount of working capital. To illustrate, assume that we are comparing Synotech to Company B. For this example, use the following totals for current assets and current liabilities:

	Synotech	Company B
Current assets (a)	$ 2,846.7	$120.0
Current liabilities (b)	2,285.2	53.2
Working capital (a - b)	$ 561.5	$ 66.8
Current ratio (a/b)	1.25:1	2.26:1

Reinforcing Problems
E12–2 Determine effects of various transactions on the current ratio.
P12–4 and P12–4A Determine effects of various transactions on working capital and current ratio.

Synotech has eight times as much working capital as Company B. However, Company B has a superior debt-paying ability since it has $2.26 of current assets for each $1.00 of current liabilities.

Short-term creditors are particularly interested in the current ratio since the conversion of inventories and accounts receivable into cash is the primary source from which the company obtains the cash to pay short-term creditors. Long-term creditors are also interested in the current ratio because a company that is unable to pay short-term debts may be forced into bankruptcy. For this reason, many bond indentures, or contracts, contain a provision requiring that the borrower maintain at least a certain minimum current ratio. A company can increase its current ratio by issuing long-term debt or capital stock or by selling noncurrent assets.

A company must guard against a current ratio that is too high, especially if caused by idle cash, slow-paying customers, and/or slow-moving inventory. Decreased net income can result when too much capital that could be used profitably elsewhere is tied up in current assets.

Refer to Illustration 12.1. The Synotech data in Column (4) indicate that current liabilities are increasing more rapidly than current assets. We could also make such an observation directly by looking at the change in the current ratio. Synotech's current ratios for 2007 and 2006 follow:

	December 31		Amount of
($ millions)	2007	2006	Increase
Current assets (a)	$2,846.7	$2,832.4	14.3
Current liabilities (b)	2,285.6	2,103.8	181.4
Working capital (a – b)	$ 561.5	$ 728.6	$(167.1)
Current ratio (a/b)	1.25:1	1.35:1	

Synotech's working capital decreased by $167.1 million, or 22.9% ($167.1/$728.6), and its current ratio decreased from 1.35:1 to 1.25:1. Together, these figures reflect that its current liabilities increased faster than its current assets.

Acid-Test (Quick) Ratio The current ratio is not the only measure of a company's short-term debt-paying ability. Another measure, called the **acid-test (quick) ratio**, is the ratio of quick assets (cash, marketable securities, and net receivables) to current liabilities. Analysts exclude inventories and prepaid expenses from current assets to compute quick assets because they might not be readily convertible into cash. The formula for the acid-test ratio is:

Reinforcing Problems
P12–3 and P12–3A Compute working capital, current ratio, and acid-test ratio.

$$\text{Acid-test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

Short-term creditors are particularly interested in this ratio, which relates the pool of cash and immediate cash inflows to immediate cash outflows.

The acid-test ratios for 2007 and 2006 for Synotech are:

	December 31		Amount of Increase or
($ millions)	2007	2006	(Decrease)
Quick assets (a)	$1,646.6	$1,648.3	$ (1.7)
Current liabilities (b)	2,285.6	2,103.8	181.8
Net quick assets (a – b)	$ (639.0)	$ (455.5)	$(183.5)
Acid-test ratio (a/b)	.72:1	.78:1	

In deciding whether the acid-test ratio is satisfactory, investors consider the quality of the marketable securities and receivables. An accumulation of poor-quality marketable securities or receivables, or both, could cause an acid-test ratio to appear deceptively favorable. When referring to marketable securities, poor quality means

securities likely to generate losses when sold. Poor-quality receivables may be uncollectible or not collectible until long past due. The quality of receivables depends primarily on their age, which can be assessed by preparing an aging schedule or by calculating the accounts receivable turnover.

Cash Flow Liquidity Ratio Another approach to measuring short-term liquidity is the **cash flow liquidity ratio.** The numerator, as an approximation of cash resources, consists of (1) cash and marketable securities, or liquid current assets, and (2) net cash provided by operating activities, or the cash generated from the company's operations. This reflects the company's ability to sell inventory and collect accounts receivable. The formula for the cash flow liquidity ratio is:

$$\frac{\text{Cash and marketable securities} + \text{Net cash provided by operating activities}}{\text{Current liabilities}}$$

For 2007, Synotech has $298.0 million in cash and cash equivalents, $71.3 million in marketable securities, $2,285.2 million in current liabilities, and $1,101.0 million in cash provided by operating activities (taken from the statement of cash flows in its annual report). Its cash flow liquidity ratio is:

$$\frac{\$298.0 + \$71.3 + \$1,101.0}{\$2,285.2} = .64 \text{ times}$$

This indicates that the company is going to have to rely on some other sources of funding to pay its current liabilities. The company's liquid current assets will only cover about two-thirds of the current liabilities. Possibly net cash provided by operations will be substantially higher in 2008.

Accounts Receivable Turnover **Turnover** is the relationship between the amount of an asset and some measure of its use. **Accounts receivable turnover** is the number of times per year that the average amount of receivables is collected. To calculate this ratio, divide net credit sales (or net sales) by average net accounts receivable; that is, accounts receivable after deducting the allowance for uncollectible accounts:

$$\text{Accounts receivable turnover} = \frac{\text{Net credit sales (or net sales)}}{\text{Average net accounts receivable}}$$

When a ratio compares an income statement item (like net credit sales) with a balance sheet item (like net accounts receivable), the balance sheet item should be an average. Ideally, analysts calculate average net accounts receivable by averaging the end-of-month balances or end-of-week balances of net accounts receivable outstanding during the period. The greater the number of observations used, the more accurate the resulting average. Often, analysts average only the beginning-of-year and end-of-year balances because this information is easily obtainable from comparative financial statements. Sometimes a formula calls for the use of an average balance, but only the year-end amount is available. Then the analyst must use the year-end amount.[1]

In theory, the numerator of the accounts receivable turnover ratio consists of only net credit sales because those are the only sales that generate accounts receivable. However, if cash sales are relatively small or their proportion to total sales remains fairly constant, analysts can obtain reliable results by using total net sales. In most cases, the analyst may have to use total net sales because the separate amounts of cash sales and credit sales are not reported on the income statement.

Synotech's accounts receivable turnover ratios for 2007 and 2006 follow. Net accounts receivable on January 1, 2005, totaled $1,259.5 million.

[1]These general comments about the use of averages in a ratio apply to the other ratios involving averages discussed in this chapter.

($ millions)	December 31 2007	2006	Amount of Increase
Net sales (a)	$10,498.8	$10,029.8	$469.0
Net accounts receivable:			
January 1	$ 1,340.3	$ 1,259.5	$ 80.8
December 31	1,277.3	1,340.3	(63.0)
Total (b)	$ 2,617.6	$ 2,599.8	$ 17.8
Average net receivables (c) (b/2 = c)	$ 1,308.8	$1,299.9	
Turnover of accounts receivable (a/c)	8.02	7.72	

The accounts receivable turnover ratio provides an indication of how quickly the company collects receivables. The accounts receivable turnover ratio for 2007 indicates that Synotech collected, or turned over, its accounts receivable slightly more than eight times. The ratio is better understood and more easily compared with a company's credit terms if we convert it into a number of days, as is illustrated in the next ratio.

Reinforcing Problems
E12–3 Compute average number of days receivables are outstanding; determine effect of increase in turnover.
BDC12–2 Compute turnover ratios for four years and number of days' sales in accounts receivable; evaluate effectiveness of company's credit policy.

Number of Days' Sales in Accounts Receivable The **number of days' sales in accounts receivable** ratio is also called the *average collection period for accounts receivable.* Calculate it as follows:

$$\text{Number of days' sales in accounts receivable (average collection period for accounts receivable)} = \frac{\text{Number of days in year (365)}}{\text{Accounts receivable turnover}}$$

The turnover ratios for Synotech show that the number of days' sales in accounts receivable decreased from about 47 days (365/7.72) in 2006 to 46 days (365/8.02) in 2007. The change means that the average collection period for the company's accounts receivable decreased from 47 to 46 days.

An Accounting Perspective

Business Insight The number of days' sales in accounts receivable ratio measures the average liquidity of accounts receivable and indicates their quality. Generally, the shorter the collection period, the higher the quality of receivables. However, the average collection period varies by industry; for example, collection periods are short in utility companies and much longer in some retailing companies. A comparison of the average collection period with the credit terms extended customers by the company provides further insight into the quality of the accounts receivable. For example, receivables with terms of 2/10, n/30 and an average collection period of 75 days need to be investigated further. It is important to determine why customers are paying their accounts much later than expected.

Inventory Turnover A company's inventory turnover ratio shows the number of times its average inventory is sold during a period. You can calculate **inventory turnover** as follows:

Reinforcing Problem
E12–5 Compute inventory turnover.

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

When comparing an income statement item and a balance sheet item, measure both in comparable dollars. Notice that we measure the numerator and denominator in cost rather than sales dollars. (Earlier, when calculating accounts receivable turnover, we measured both numerator and denominator in sales dollars.) Inventory turnover relates a measure of sales volume to the average amount of goods on hand to produce this sales volume.

Synotech's inventory on January 1, 2006, was $856.7 million. The following schedule shows that the inventory turnover decreased slightly from 5.85 times per

year in 2006 to 5.76 times per year in 2007. To convert these turnover ratios to the number of days it takes the company to sell its entire stock of inventory, divide 365 by the inventory turnover. Synotech's average inventory sold in about 63 and 62 (365/5.76 and 365/5.85) in 2007 and 2006, respectively.

($ millions)	December 31 2007	December 31 2006	Amount of Increase or (Decrease)
Cost of goods sold (a)	$5,341.3	$5,223.7	$117.6
Merchandise inventory:			
January 1	$929.8	$856.7	$ 73.1
December 31	924.8	929.8	(5.0)
Total (b)	$1,854.6	$1,786.5	$ 68.1
Average inventory (c) (b/2 = c)	$927.3	$893.3	
Turnover of inventory (a/c)	5.76	5.85	

Other things being equal, a manager who maintains the highest inventory turnover ratio is the most efficient. Yet, other things are not always equal. For example, a company that achieves a high inventory turnover ratio by keeping extremely small inventories on hand may incur larger ordering costs, lose quantity discounts, and lose sales due to lack of adequate inventory. In attempting to earn satisfactory income, management must balance the costs of inventory storage and obsolescence and the cost of tying up funds in inventory against possible losses of sales and other costs associated with keeping too little inventory on hand.

Business Insight

An Accounting Perspective

Cabletron Systems develops, manufactures, installs, and supports a wide range of standards-based LAN and WAN connectivity hardware and software products. For the year ended March 3, 2001, both its number of day's sales in accounts receivable and its inventory turnover rate increased as compared to the prior year. In its 2001 annual report, the company explained these increases as follows:

Accounts receivable, net of allowance for doubtful accounts, were $210.9 million, or 66 days of sales outstanding, at March 3, 2001 compared to $228.4 million at February 29, 2000, or 54 days sales outstanding. The increase in days of sales outstanding was a result of the timing of sales and related collections.

Worldwide inventories were $98.1 million at March 3, 2001 or 63 days of inventory, compared to $85.0 million, or 37 days of inventory, at February 29, 2000. The increase of days in inventory was due to the increase in finished goods inventory purchased to protect against an anticipated shortage of supply components.

Total Assets Turnover **Total assets turnover** shows the relationship between the dollar volume of sales and the average total assets used in the business. We calculate it as follows:

$$\text{Total assets turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$$

This ratio measures the efficiency with which a company uses its assets to generate sales. The larger the total assets turnover, the larger the income on each dollar invested in the assets of the business. For Synotech, the total asset turnover ratios for 2007 and 2006 follow. Total assets as of January 1, 2006, were $7,370.9 million.

Real World Example
At December 31, 2000, General Electric Company reported total assets turnover of 0.31.

Note to the Student
Use any company's annual report to calculate the liquidity ratios for the company.

($ millions)	2007	2006	Amount of Increase
Net sales (a)	$ 10,498.8	$ 10,029.8	$ 469.0
Total assets:			
January 1	$9,170.8	$7,370.9	$1,799.9
December 31	9,481.8	9,170.8	311.0
Total (b)	$18,652.6	$16,541.7	$2,110.9
Average total assets (c) (b/2 = c)	$9,331.8	$8,270.9	
Turnover of total assets (a/c)	1.13:1	1.21:1	

Each dollar of total assets produced $1.21 of sales in 2006 and $1.13 of sales in 2007. In other words, between 2006 and 2007, the company had a decrease of $.08 of sales per dollar of investment in assets.

Equity, or Long-Term Solvency, Ratios

Equity, or long-term solvency, ratios show the relationship between debt and equity financing in a company.

Note to the Student
Use any company's annual report to calculate the equity ratios for the company.

Equity (Stockholders' Equity) Ratio The two basic sources of assets in a business are owners (stockholders) and creditors; the combined interests of the two groups are *total equities.* In ratio analysis, however, the term *equity* generally refers only to stockholders' equity. Thus, the **equity (stockholders' equity) ratio** indicates the proportion of total assets (or total equities) provided by stockholders (owners) on any given date. The formula for the equity ratio is:

$$\text{Equity ratio} = \frac{\text{Stockholders' equity}}{\text{Total assets (or total equities)}}$$

Synotech's liabilities and stockholders' equity from Illustration 12.1 follow. The company's equity ratio increased from 22.0% in 2006 to 25.7% in 2007. Illustration 12.1 shows that stockholders increased their proportionate equity in the company's assets due largely to the retention of earnings (which increases retained earnings).

	December 31, 2007		December 31, 2006	
($millions)	Amount	Percent	Amount	Percent
Current liabilities	$2,285.2	24.1 %	$2,103.8	22.9 %
Long-term liabilities	4,755.8	50.2	5,051.3	55.1
Total liabilities	$7,041.0	74.3	$7,155.1	78.0
Total stockholders' equity	2,440.8	25.7	2,015.7	22.0
Total equity (equal to total assets)	$9,481.8	100.0 %	$9,170.8	100.0 %

The equity ratio must be interpreted carefully. From a creditor's point of view, a high proportion of stockholders' equity is desirable. A high equity ratio indicates the existence of a large protective buffer for creditors in the event a company suffers a loss. However, from an owner's point of view, a high proportion of stockholders' equity may or may not be desirable. If the business can use borrowed funds to generate income in excess of the net after-tax cost of the interest on such funds, a lower percentage of stockholders' equity may be desirable.

To illustrate the effect of higher leveraging (i.e., a larger proportion of debt), assume that Synotech could have financed an increase in its productive capacity with $40 million of 6% bonds instead of issuing 5 million additional shares of common stock. The effect on income for 2007 would be as follows, assuming a federal income tax rate of 40%:

Net income as presently stated (Illustration 12.2)	$762,000,000
Deduct additional interest on debt (0.06 × $40 million)	2,400,000
	$759,600,000
Add reduced taxes due to interest deduction (.4 × 2,400,000)	960,000
Adjusted net income	$760,560,000

As shown, increasing leverage by issuing bonds instead of common stock reduces net income. However, there are also fewer shares of common stock outstanding. Assume the company has 183 million shares of common stock outstanding. Earnings per share (EPS) with the additional debt would be $4.16 (or $760,560,000/183 million shares), and EPS with the additional stock would be $4.05 (or $762,000,000/188 million shares).

Since investors place heavy emphasis on EPS amounts, many companies in recent years have introduced large portions of debt into their capital structures to increase EPS, especially since interest rates have been relatively low in recent years.

We should point out, however, that too low a percentage of stockholders' equity (too much debt) has its dangers. Financial leverage magnifies losses per share as well as EPS since there are fewer shares of stock over which to spread the losses. A period of business recession may result in operating losses and shrinkage in the value of assets, such as receivables and inventory, which in turn may lead to an inability to meet fixed payments for interest and principal on the debt. As a result, the company may be forced into liquidation, and the stockholders could lose their entire investments.

Stockholders' Equity to Debt (Debt to Equity) Ratio Analysts express the relative equities of owners and creditors in several ways. To say that creditors held a 74.3% interest in the assets of Synotech on December 31, 2007, is equivalent to saying stockholders held a 25.7% interest. Another way of expressing this relationship is the **stockholders' equity to debt ratio**:

$$\text{Stockholders' equity to debt ratio} = \frac{\text{Stockholders' equity}}{\text{Total debt}}$$

Such a ratio for Synotech would be .28:1 (or $2,015.7 million/$7,155.1 million) on December 31, 2006, and .35:1 (or $2,440.8 million/$7,041.0 million) on December 31, 2007. This ratio is often inverted and called the **debt to equity ratio.** Some analysts use only long-term debt rather than total debt in calculating these ratios. These analysts do not consider short-term debt to be part of the capital structure since it is paid within one year.

Profitability Tests

Profitability is an important measure of a company's operating success. Generally, we are concerned with two areas when judging profitability: (1) relationships on the income statement that indicate a company's ability to recover costs and expenses, and (2) relationships of income to various balance sheet measures that indicate the company's relative ability to earn income on assets employed. Each of the following ratios utilizes one of these relationships.

Reinforcing Problems
P12–5 and P12–5A Compute rate of return on operating assets and demonstrate effects of various transactions on this rate of return.

Rate of Return on Operating Assets The best measure of earnings performance without regard to the sources of assets is the relationship of net operating income to operating assets, the **rate of return on operating assets.** This ratio shows the earning power of the company as a bundle of assets. By disregarding both nonoperating assets and nonoperating income elements, the rate of return on operating assets measures the profitability of the company in carrying out its primary business functions. We can break the ratio down into two elements—the operating margin and the turnover of operating assets.

Operating margin reflects the percentage of each dollar of net sales that becomes net operating income. Net operating income excludes **nonoperating income elements** such as extraordinary items, cumulative effect on prior years of changes in accounting principle, losses or gains from discontinued operations, interest revenue, and interest expense. Another name for **net operating income** is "income before interest and taxes" (IBIT). The formula for operating margin is:

$$\text{Operating margin} = \frac{\text{Net operating income}}{\text{Net sales}}$$

Turnover of operating assets shows the amount of sales dollars generated for each dollar invested in operating assets. **Operating assets** are all assets actively used in producing operating revenues. Typically, we use year-end operating assets, even though in theory an average would be better. **Nonoperating assets** are owned by a company but not used in producing operating revenues, such as land held for future use, a factory building rented to another company, and long-term bond investments.
Analysts do not use these nonoperating assets in evaluating earnings performance. Nor do they use total assets that include nonoperating assets not contributing to the generation of sales. The formula for the turnover of operating assets is:

$$\text{Turnover of operating assets} = \frac{\text{Net sales}}{\text{Operating assets}}$$

The rate of return on operating assets of a company is equal to its operating margin multiplied by turnover of operating assets. The more a company earns per dollar of sales and the more sales it makes per dollar invested in operating assets, the higher is the return per dollar invested. To find the rate of return on operating assets, use the following formulas:

$$\text{Rate of return on operating assets} = \text{Operating margin} \times \text{Turnover of operating assets}$$

or

$$\text{Rate of return on operating assets} = \frac{\text{Net operating income}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Operating assets}}$$

Note to the Student
Use any annual report and calculate the profitability ratios.

Because net sales appears in both ratios (once as a numerator and once as a denominator), we can cancel it out, and the formula for rate of return on operating assets becomes:

$$\text{Rate of return on operating assets} = \frac{\text{Net operating income}}{\text{Operating assets}}$$

Reinforcing Problem
E12–6 Compute rate of return on operating assets.

For analytical purposes, the formula should remain in the form that shows margin and turnover separately, since it provides more information.

The rates of return on operating assets for Synotech for 2007 and 2006 are:

($ millions)	2007	2006	Amount of Increase or (Decrease)
Net operating income (a)*	$1,382.4	$ 682.7	$699.7
Net sales (b)	$10,498.8	$10,029.8	$469.0
Operating assets (c)†	$9,481.8	$ 9,170.8	$311.0
Operating margin (a/b)	13.17%	6.81%	
Turnover of operating assets (b/c)	1.11 times	1.09 times	
Rate of return on operating assets (a/c)	14.58%	7.44%	

*Calculated as income before income taxes plus net interest expense. This method excludes nonoperating items.
†When companies have no nonoperating assets, total assets are used in the calculation.

Net Income to Net Sales (Return on Sales) Ratio Another measure of a company's profitability is the **net income to net sales** ratio, calculated as follows:

$$\text{Net income to net sales} = \frac{\text{Net income}}{\text{Net sales}}$$

This ratio measures the proportion of the sales dollar that remains after deducting all expenses. The computations for Synotech for 2007 and 2006 are:

An Accounting Perspective

Business Insight Companies that are to survive in the economy must attain some minimum rate of return on operating assets. However, they can attain this minimum rate of return in many different ways. To illustrate, consider a grocery store and a jewelry store, each with a rate of return of 8% on operating assets. The grocery store normally would attain this rate of return with a low margin and a high turnover, while the jewelry store would have a high margin and a low turnover, as shown here:

	Margin	×	Turnover	=	Rate of Return on Operating Assets
Grocery store	1%	×	8.0 times	=	8%
Jewelry store	20	×	0.4	=	8

($ millions)	2007	2006	Amount of Increase or (Decrease)
Net income (a)	$ 762.0	$206.4	$555.6
Net sales (b)	$10,498.8	$10,029.8	$469.0
Ratio of net income to net sales (a/b)	7.26%	2.06%	

Although the ratio of net income to net sales indicates that the net amount of profit increased on each sales dollar, exercise care in using and interpreting this ratio. The net income includes all nonoperating items that may occur only in a particular period; therefore, net income includes the effects of such things as extraordinary items, changes in accounting principle, effects of discontinued operations, and interest charges. Thus, a period that contains the effects of an extraordinary item is not comparable to a period that contains no extraordinary items. Also, since interest expense is deductible in the determination of net income while dividends are not, the methods used to finance a company's assets affect net income.

Return on Average Common Stockholders' Equity From the stockholders' point of view, an important measure of the income-producing ability of a company is the relationship of **return on average common stockholders' equity,** also called *rate of return on average common stockholders' equity,* or simply the **return on equity (ROE).** Although stockholders are interested in the ratio of operating income to operating assets as a measure of management's efficient use of assets, they are even more interested in the return the company earns on each dollar of stockholders' equity. The formula for return on average common stockholders' equity if no preferred stock is outstanding is:

Reinforcing Problem
E12–7 Compute return on common stockholders' equity.

$$\text{Return on average common stockholders' equity} = \frac{\text{Net income}}{\text{Average common stockholders' equity}}$$

When a company has preferred stock outstanding, the numerator of this ratio becomes net income minus the annual preferred dividends, and the denominator becomes the average book value of common stock. The book value of common stock is equal to total stockholders' equity minus (1) the liquidation value (usually equal to par value) of preferred stock and (2) any dividends in arrears on cumulative preferred stock. Thus, the formula becomes:

$$\text{Return on average common stockholders' equity} = \frac{\text{Net income} - \text{Preferred stock dividends}}{\text{Average book value of common stock}}$$

Synotech has preferred stock outstanding. The ratios for the company follow. Total common stockholders' equity on January 1, 2006, was $1,697.4 million. Preferred dividends were $25.7 million in 2007 and $25.9 million in 2006.

($ millions)	2007	2006	Amount of Increase or (Decrease)
Net income – Preferred stock dividends (a)	$ 736.3	$ 180.5	$ 555.8
Total common stockholders' equity (book value of common stock):*			
January 1	$1,531.5	$1,697.4	$(165.9)
December 31	1,969.6	1,531.5	438.1
Total (b)	$3,501.1	$3,228.9	$ 272.2
Average common stockholders' equity: (c) (b/2 =c)	$1,750.6	$1,614.5	
Return on common stockholders' equity (a/c)	42.06%	11.18%	

*Total stockholders' equity – Par value of preferred stock

The stockholders would regard the increase in the ratio from 11.18% to 42.06% favorably. This ratio indicates that for each dollar of capital invested by a common stockholder, the company earned approximately 42 cents in 2007.

An Accounting Perspective

Business Insight Sometimes, two companies have the same return on assets but have different returns on stockholders' equity, as shown here:

	Company 1	Company 2
Return on assets	12.0%	12.0%
Return on stockholders' equity	6.4	8.0

The difference of 1.6% in Company 2's favor is the result of Company 2's use of borrowed funds, particularly long-term debt, in its capital structure. Use of these funds (or preferred stock with a fixed return) is called trading on the equity. When a company is trading profitably on the equity, it is generating a higher rate of return on its borrowed funds than it is paying for the use of the funds. The excess, in this case 1.6%, is accruing to the benefit of the common stockholders, because their earnings are being increased.

Companies that magnify the gains from this activity for the stockholders are using *leverage.* Using leverage is a risky process because losses also can be magnified, to the disadvantage of the common stockholders.

Reinforcing Problem
E12–4 Compute cash flow margin.

Cash Flow Margin The cash flow margin measures a company's overall efficiency and performance. The **cash flow margin** indicates the ability of a company to translate sales into cash. Measuring the amount of cash a company generates from every dollar of sales is important because a company needs cash to service debt, pay dividends, and invest in new capital assets. The formula for the cash flow margin is:

$$\text{Cashflow margin} = \frac{\text{Net cash provided by operating activities}}{\text{Net sales}}$$

Thus, we calculate Synotech's 2007 cash flow margin as follows:

$$\frac{\$1{,}101.0 \text{ million net cash provided by operating activities}}{\$10{,}498.8 \text{ million net sales}} = 10.49\%$$

Reinforcing Problems
E12–8 Compute EPS.
E12–10 Compute EPS for current and prior year.

Earnings per Share of Common Stock Probably the measure used most widely to appraise a company's operations is **earnings per share (EPS)** of common stock. EPS is equal to earnings available to common stockholders divided by the weighted-

average number of shares of common stock outstanding. The financial press regularly publishes actual and forecasted EPS amounts for publicly traded corporations, together with period-to-period comparisons. The Accounting Principles Board noted the significance attached to EPS by requiring that such amounts be reported on the face of the income statement.[2]

The calculation of EPS may be fairly simple or highly complex depending on a corporation's capital structure. A company has a simple capital structure if it has no outstanding securities (e.g., convertible bonds, convertible preferred stocks, warrants, or options) that can be exchanged for common stock. If a company has such securities outstanding, it has a complex capital structure. Discussion of EPS for a corporation with a complex capital structure is beyond the scope of this text.

A company with a simple capital structure reports a single basic EPS amount, which is calculated as follows:

$$\text{EPS of common stock} = \frac{\text{Earnings available to common stockholders}}{\text{Weighted-average number of common shares outstanding}}$$

Real World Example
At October 31, 2000, Hewlett Packard reported net income of $3,561M and EPS of $1.87.

The amount of earnings available to common stockholders is equal to net income minus the current year's preferred dividends, whether such dividends have been declared or not.

Determining the Weighted-Average Number of Common Shares The denominator in the EPS fraction is the weighted-average number of common shares outstanding for the period. If the number of common shares outstanding did not change during the period, the weighted-average number of common shares outstanding would, of course, be the number of common shares outstanding at the end of the period. The balance in the Common Stock account of Synotech (Illustration 12.1) was $219.9 million on December 31, 2007. The common stock had a $1.20 par value. Assuming no common shares were issued or redeemed during 2007, the weighted-average number of common shares outstanding would be 183.2 million (or $219.9 million/$1.20 per share). (Normally, common treasury stock reacquired and reissued are also included in the calculation of the weighted-average number of common shares outstanding. We ignore treasury stock transactions to simplify the illustrations.)

If the number of common shares changed during the period, such a change increases or decreases the capital invested in the company and should affect earnings available to stockholders. To compute the weighted-average number of common shares outstanding, we weight the change in the number of common shares by the portion of the year that those shares were outstanding. Shares are outstanding only during those periods that the related capital investment is available to produce income.

To illustrate, assume that during 2006 Synotech's common stock balance increased by $14.0 million (11.7 million shares). Assume that the company issued 9.5 million of these shares on April 1, 2006, and the other 2.2 million shares on October 1, 2006. The computation of the weighted-average number of common shares outstanding would be:

171.5 million shares x 1 year	171.500	million
9.5 million shares x ¾ year (April–December)	7.125	million
2.2 million shares x ¼ year (October–December)	.550	million
Weighted-average number of common shares outstanding	179.125	million

An alternate method looks at the total number of common shares outstanding, weighted by the portion of the year that the number of shares was outstanding, as follows:

Reinforcing Problem
E12–9 Compute weighted-average number of shares outstanding.

[2]Accounting Principles Board, *Opinion No. 15,* "Reporting Earnings per Share" (New York: AICPA, 1969), par. 12. *FASB Statement No. 128,* "Earnings per Share" (Norwalk, Connecticut: FASB, 1997), simplified the standards for computing earnings per share and made them comparable to international EPS standards.

171.5 million shares x 1/4 year (January—March)	42.875	million
181.0 million shares x 1/2 year (April—September)	90.500	million
183.2 million shares x 1/3 year (October—December)	45.800	million
Weighted-average number of shares outstanding	179.175	million

Another alternate method is:

171.5 million shares x	3 months	=	514.5	million share-months
181.0 million shares x	6 months	=	1,086.0	million share-months
183.2 million shares x	3 months	=	549.6	million share-months
	12 months		2,150.1	million share-months

2,150.1 million share-months/12 months = 179.175 million

Note that all three methods yield the same result. In 2007, the balance in the common stock account did not change as it had during 2006. Therefore, the weighted-average number of common shares outstanding during 2007 is equal to the number of common shares issued, 183.2 million. The EPS of common stock for the Synotech are:

($ millions)	**2007**	**2006**	**Amount of Increase or (Decrease)**
Net income – preferred dividends (a)	$736.30	$180.50	$555.80
Average number of shares of common stock outstanding (b)	183.20	179.125	4.025
EPS of common stock (a/b)	$4.02	$1.01	

Synotech's stockholders would probably view the increase of approximately 298.0% ([$4.02 – $1.01]/$1.01) in EPS from $1.01 to $4.02 favorably.

EPS and Stock Dividends or Splits Increases in shares outstanding as a result of a stock dividend or stock split do not require weighting for fractional periods. Such shares do not increase the capital invested in the business and, therefore, do not affect income. All that is required is to restate all prior calculations of EPS using the increased number of shares. For example, assume a company reported EPS for 2007 as $1.20 (or $120,000/100,000 shares) and earned $180,000 in 2008. The only change in common stock over the two years was a two-for-one stock split on December 1, 2008, which doubled the shares outstanding to 200,000. The firm would restate EPS for 2007 as $0.60 (or $120,000/200,000 shares) and as $0.90 ($180,000/200,000 shares) for 2008.

Basic EPS and Diluted EPS In the merger wave of the 1960s, corporations often issued securities to finance their acquisitions of other companies. Many of the securities issued were *calls on common* or possessed *equity kickers.* These terms mean that the securities were convertible to, or exchangeable for, shares of their issuers' common stock. As a result, many complex problems arose in computing EPS. Until 1997, *APB Opinion No. 15* provided guidelines for solving these problems. In 1997, *FASB Statement No. 128,* "Earnings per Share" replaced *APB Opinion No. 15.* A company with a complex capital structure must present at least two EPS calculations, basic EPS and diluted EPS. Because of the complexities involved in the calculations, we reserve further discussion of these two EPS calculations for an intermediate accounting text.

Reinforcing Problem
E12–11 Compute times interest earned.

Times Interest Earned Ratio Creditors, especially long-term creditors, want to know whether a borrower can meet its required interest payments when these payments come due. The **times interest earned ratio**, or *interest coverage ratio,* is an indication of such an ability. It is computed as follows:

$$\text{Times interest earned ratio} = \frac{\text{Income before interest and taxes (IBIT)}}{\text{Interest expense}}$$

The ratio is a rough comparison of cash inflows from operations with cash outflows for interest expense. Income before interest and taxes (IBIT) is the numerator because there would be no income taxes if interest expense is equal to or greater than IBIT. (To find income before interest and taxes, take net income from continuing operations and add back the net interest expense and taxes.) Analysts disagree on whether the denominator should be (1) only interest expense on long-term debt, (2) total interest expense, or (3) net interest expense. We will use net interest expense in the Synotech illustration.

For Synotech, the net interest expense is $236.9 million . With an IBIT of $1,382.4 million, the times interest earned ratio is 5.84, calculated as:

$$\frac{\$1{,}382.4}{\$236.9} = 5.84 \text{ times}$$

The company earned enough during the period to pay its interest expense almost 6 times over.

Low or negative interest coverage ratios suggest that the borrower could default on required interest payments. A company is not likely to continue interest payments over many periods if it fails to earn enough income to cover them. On the other hand, interest coverage of 5 to 10 times or more suggests that the company is not likely to default on interest payments.

Times Preferred Dividends Earned Ratio Preferred stockholders, like bondholders, must usually be satisfied with a fixed-dollar return on their investments. They are interested in the company's ability to make preferred dividend payments each year. We can measure this ability by computing the **times preferred dividends earned ratio** as follows:

$$\text{Times preferred dividends earned ratio} = \frac{\text{Net income}}{\text{Annual preferred dividends}}$$

Synotech has a net income of $762.0 million and preferred dividends of $25.7 million. The number of times the annual preferred dividends are earned for 2007 is:

$$\frac{\$762.0}{\$25.7} = 29.65{:}1, \text{ or } 29.65 \text{ times}$$

The higher this rate, the higher is the probability that the preferred stockholders will receive their dividends each year.

Market Tests

Analysts compute certain ratios using information from the financial statements and information about the market price of the company's stock. These tests help investors and potential investors assess the relative merits of the various stocks in the marketplace.

The **yield** on a stock investment refers to either an earnings yield or a dividends yield.

Earnings Yield on Common Stock You can calculate a company's **earnings yield on common stock** as follows:

$$\text{Earnings yield on common stock} = \frac{\text{EPS}}{\text{Current market price per share of common stock}}$$

Assume Synotech has common stock with an EPS of $5.03 and that the quoted market price of the stock on the New York Stock Exchange is $110.70. The earnings yield on common stock would be:

$$\frac{\$5.03}{\$110.7} = 4.54\%$$

Reinforcing Problem
E12–13 Compute EPS and price-earnings ratio.

Price-Earnings Ratio When inverted, the earnings yield on common stock is the **price-earnings ratio**. To compute the price-earnings ratio:

$$\text{Price-earnings ratio} = \frac{\text{Current market price per share of common stock}}{\text{EPS}} = \frac{\$110.7}{\$5.03} = 22.01:1$$

Investors would say that this stock is selling at 22 times earnings, or at a multiple of 22. These investors might have a specific multiple in mind that indicates whether the stock is underpriced or overpriced. Different investors have different estimates of the proper price-earnings ratio for a given stock and also different estimates of the future earnings prospects of the company. These different estimates may cause one investor to sell stock at a particular price and another investor to buy at that price.

Payout Ratio on Common Stock Using dividend yield, investors can compute the payout ratio on common stock. Assume that Synotech's dividends per share were $1.80 and earnings per share were $5.03. To calculate **payout ratio on common stock**, divide the dividend per share of common stock by EPS. The payout ratio fstock in 2007 is:

$$\text{Payout ratio on common stock} = \frac{\text{Dividend per share of common stock}}{\text{EPS}} = \frac{\$1.80}{\$5.03} = 35.8\%$$

A payout ratio of 35.8% means that the company paid out 35.8% of its earnings in the form of dividends. Some investors are attracted by the stock of companies that pay out a large percentage of their earnings. Other investors are attracted by the stock of companies that retain and reinvest a large percentage of their earnings. The tax status of the investor has a great deal to do with this preference. Investors in high tax brackets often prefer to have the company reinvest the earnings with the expectation that this reinvestment results in share price appreciation.

Dividend Yield on Common Stock The dividend paid per share of common stock is also of much interest to common stockholders. When the current annual dividend per share of common stock is divided by the current market price per share of common stock, the result is called the **dividend yield on common stock**. Synotech's December 31, 2007, common stock price was $110.70 per share. Its dividends per share were $1.80. The company's dividend yield on common stock was:

$$\text{Dividend yield on common stock} = \frac{\text{Dividend per share of common stock}}{\text{Current market price per share of common stock}} = \frac{\$1.80}{\$110.7} = 1.63\%$$

Dividend Yield on Preferred Stock Preferred stockholders, as well as common stockholders, are interested in dividend yields. The computation of the **dividend yield on preferred stock** is similar to the common stock dividend yield computation. Assume that Synotech's dividend per share of preferred stock is $5.10 with a current market price of $84.00 per share. We compute the dividend yield on preferred stock as follows:

$$\text{Dividend yield on preferred stock} = \frac{\text{Dividend per share of preferred stock}}{\text{Current market price per share of preferred stock}} = \frac{\$5.10}{\$84.00} = 6.07\%$$

Reinforcing Problem
E12–12 Compute times dividends earned and dividend yield.

Through the use of dividend yield rates, we can compare different preferred stocks having different annual dividends and different market prices.

Cash Flow per Share of Common Stock Investors calculate the **cash flow per share of common stock** ratio as follows:

$$\text{Cash flow per share of common stock} = \frac{\text{Net cash provided by operating activities}}{\text{Average number of shares of common stock outstanding}}$$

Note to the Student
Calculate the market test ratios for a company. You may want to update the earnings yield on common stock and price-earnings ratio from *The Wall Street Journal.*

Currently, *FASB Statement No. 95* does not permit the use of this ratio for external reporting purposes. However, some mortgage and investment banking firms do use this ratio to judge the company's ability to pay dividends and pay liabilities. The cash flow per share of common stock ratio for Synotech is as follows:

	Fiscal Year	
	2007	**2006**
Cash provided by operating activities (a)	$1,101.0	$972.3
Average shares outstanding (b) (assumed)	146.6	145.2
Cash flow per share of common stock (a) ÷ (b)	$7.51	$6.70

Final Considerations in Financial Statement Analysis

Objective 5
Describe the considerations used in financial statement analysis.

Standing alone, a single financial ratio may not be informative. Investors gain greater insight by computing and analyzing several related ratios for a company. Illustration 12.3 summarizes the ratios presented in this chapter, and Illustration 12.4 on page 390 presents them graphically.

Financial analysis relies heavily on informed judgment. As guides to aid comparison, percentages and ratios are useful in uncovering potential strengths and weaknesses. However, the financial analyst should seek the basic causes behind changes and established trends.

An Accounting Perspective

Uses of Technology Most companies calculate some of the ratios we have discussed, if not all of them. To efficiently and effectively perform these calculations, accountants use computers. Some programs that gather information in the preparation of financial statements calculate the ratios at the end of a period. Accountants also create spreadsheets to perform this task. Remember, to interpret the numbers correctly, investors and management must compare these ratios with the industry in which the company operates.

Illustration 12.3 Summary of Ratios

Liquidity Ratios	Formula	Significance
Current, or working capital , ratio	Current assets ÷ Current liabilities	Test of debt-paying ability
Acid-test (quick) ratio	Quick assets (Cash + Marketable securities + Net receivables) ÷ Current liabilities	Test of immediate debt-paying ability
Cash flow liquidity ratio	(Cash and marketable securities + Net cash provided by operating activities) ÷ Current liabilities	Test of short-term, debt-paying ability
Accounts receivable turnover	Net credit sales (or net sales) ÷ Average net accounts receivable	Test of quality of accounts receivable
Number of days' sales in accounts receivable (average collection period of accounts receivable)	Number of days in year (365) ÷ Accounts receivable turnover	Test of quality of accounts receivable
Inventory turnover	Cost of goods sold ÷ Average inventory	Test of whether or not a sufficient volume of business is being generated relative to inventory
Total assets turnover	Net sales ÷ Average total assets	Test of whether or not the volume of business generated is adequate relative to amount of capital invested in the business
Equity, or Long-term Solvency, Ratios		
Equity (stockholders' equity) ratio	Stockholders' equity ÷ Total assets (or total equities)	Index of long-run solvency and safety
Stockholder' equity to debt (debt to equity) ratio	Stockholders' equity ÷ Total debt	Measure of the relative proportion of stockholders' and of creditors' equities
Profitability Tests		
Rate of return on operating assets	Net operating income ÷ Operating assets or Operating margin X Turnover of operating assets	Measure of managerial effectiveness
Net income to net sales (return on sales)	Net income ÷ Net sales	Indicator of the amount of net profit on each dollar of sales
Return on average common stockholders' equity	Net income ÷ Average common stockholders' equity	Measure of what a given company earned for its stockholders from all sources as a percentage of common stockholders' investment
Cash flow margin	Net cash provided by operating activities ÷ Net sales	Measure of the ability of a firm to translate sales into cash
EPS of common stock	Earnings available to common stockholders' ÷ Weighted-average number of common shares outstanding	Measure of the return to investors
Times interest earned ratio	Income before interest and taxes ÷ Interest expense	Test of the likelihood that creditors will continue to receive their interest payments
Time preferred dividends earned ratio	Net income ÷ Annual preferred dividends	Test of the likelihood that preferred stockholders will receive their dividend each year
Market Tests		
Earnings yield on common stock	EPS ÷ Current market price per share of common stock	Comparison with other common stocks
Price-earnings ratio	Current market price per share of common stock ÷ EPS	Index of whether a stock is relatively cheap or expensive based on the ratio
Payout ratio on common stock	Dividend per share of common stock ÷ EPS	Index of whether company pays out a large percentage of earnings as dividends or reinvests most of its earnings
Dividend yield on common stock	Dividend per share of common stock ÷ Current market price per share of common stock	Comparisons with other common stocks
Dividend yield on preferred stock	Dividend per share of preferred stock ÷ Current market price per share of preferred stock	Comparison with other preferred stocks
Cash flow per share of common stock	Net cash provided by operating activities ÷ Average number of share of common stock outstanding	Test of ability to pay dividends and liabilities

Need for Comparable Data

Analysts must be sure that their comparisons are valid—especially when the comparisons are of items for different periods or different companies. They must follow consistent accounting practices if valid interperiod comparisons are to be made. Comparable intercompany comparisons are more difficult to secure. Accountants cannot do much more than disclose the fact that one company is using FIFO and another is using LIFO for inventory and cost of goods sold computations. Such a disclosure alerts analysts that intercompany comparisons of inventory turnover ratios, for example, may not be comparable.

Also, when comparing a company's ratios to industry averages provided by an external source such as Dun & Bradstreet, the analyst should calculate the company's ratios in the same manner as the reporting service. Thus, if Dun & Bradstreet uses net sales (rather than cost of goods sold) to compute inventory turnover, so should the analyst. Net sales is sometimes preferable because all companies do not compute and report cost of goods sold amounts in the same manner.

Influence of External Factors

Facts and conditions not disclosed by the financial statements may, however, affect their interpretation. A single important event may have been largely responsible for a given relationship. For example, competitors may put a new product on the market, making it necessary for the company under study to reduce the selling price of a product suddenly rendered obsolete. Such an event would severely affect the percentage of gross margin to net sales. Yet there may be little chance that such an event will happen again.

Analysts must consider general business conditions within the industry of the company under study. A corporation's downward trend in earnings, for example, is less alarming if the industry trend or the general economic trend is also downward.

Investors also need to consider the seasonal nature of some businesses. If the balance sheet date represents the seasonal peak in the volume of business, for example, the ratio of current assets to current liabilities may be much lower than if the balance sheet date is in a season of low activity.

Potential investors should consider the market risk associated with the prospective investment. They can determine market risk by comparing the changes in the price of a stock in relation to the changes in the average price of all stocks.

Potential investors should realize that acquiring the ability to make informed judgments is a long process and does not occur overnight. Using ratios and percentages without considering the underlying causes may lead to incorrect conclusions.

Need for Standards of Comparison

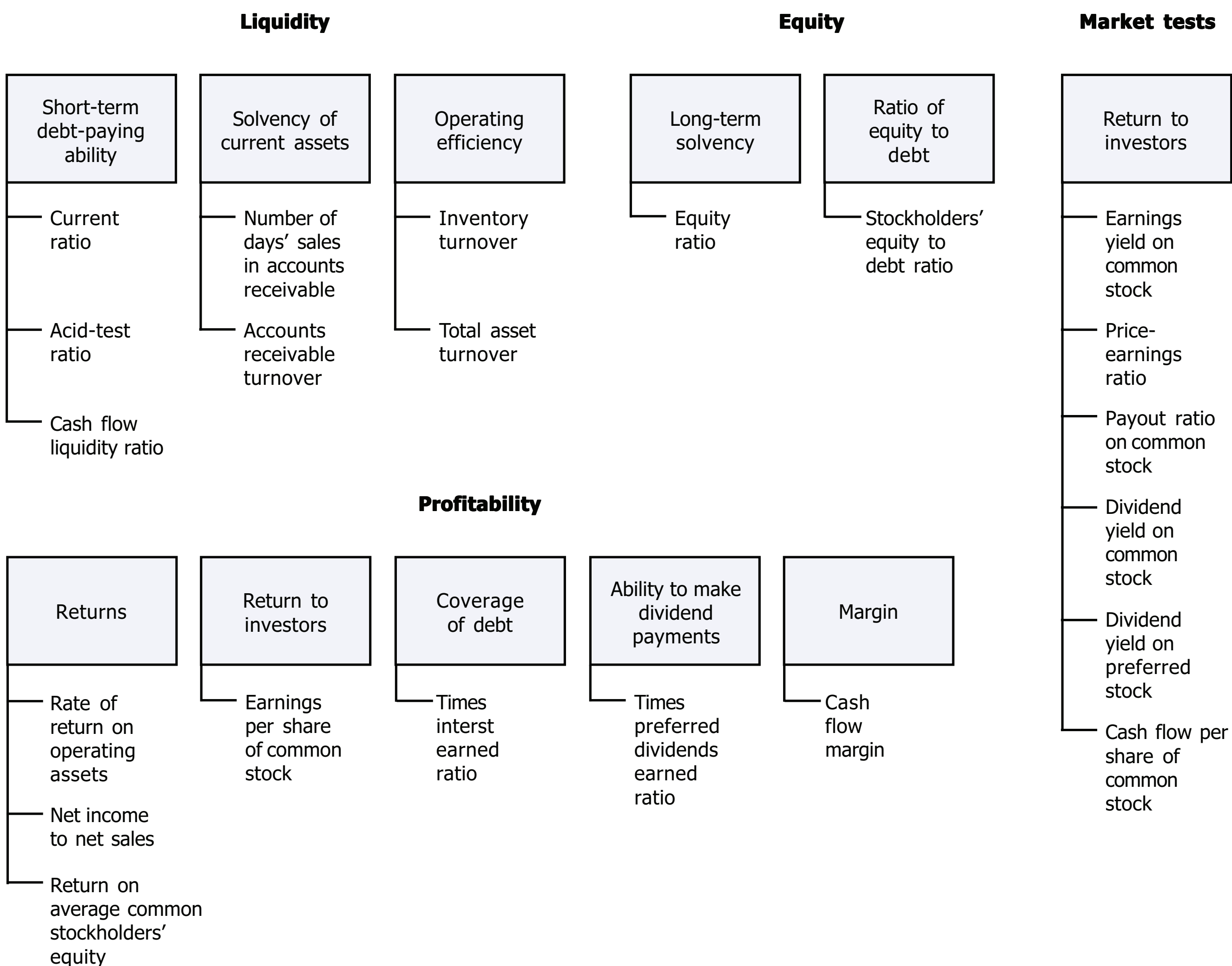
Relationships between financial statement items also become more meaningful when standards are available for comparison. Comparisons with standards provide a starting point for the analyst's thinking and lead to further investigation and, ultimately, to conclusions and business decisions. Such standards consist of (1) those in the analyst's own mind as a result of experience and observations, (2) those provided by the records of past performance and financial position of the business under study, and (3) those provided about other enterprises. Examples of the third standard are data available through trade associations, universities, research organizations (such as Dun & Bradstreet and Robert Morris Associates), and governmental units (such as the Federal Trade Commission).

In financial statement analysis, remember that standards for comparison vary by industry, and financial analysis must be carried out with knowledge of specific industry characteristics. For example, a wholesale grocery company would have large inventories available to be shipped to retailers and a relatively small investment in property, plant, and equipment, while an electric utility company would have no merchandise inventory (except for repair parts) and a large investment in property, plant, and equipment.

Even within an industry, variations may exist. Acceptable current ratios, gross margin percentages, debt to equity ratios, and other relationships vary widely depending

Reinforcing Problems
P12–8 and P12–8A Determine effects on ratios of change in accounting method (FIFO to LIFO).
BDC12–1 Compute net income, identify reason for cash increase, state main sources of financing, and indicate further analyses needed.
ARA12–4 Analyze management's objectives and performance from the viewpoints of a creditor and an investor (real world problem).

Illustration 12.4 Graphic Depiction of Financial Statement analysis Utilizing Financial Rations



on unique conditions within an industry. Therefore, it is important to know the industry to make comparisons that have real meaning.

The Future

The bankruptcies of companies like Enron and WorldCom, with the resulting significant losses to employees, stockholders, and other members of the general public, have caused important changes in corporate governance, standards of accounting, and auditing procedures and standards. These changes have come about as a result of self-regulation, oversight by the Public Company Accounting Oversight Board, regulation by the Securities and Exchange Commission, regulation by the stock exchanges, and legislation passed by Congress, and by some combination of these actions. Further changes are likely.

Financial statements are likely to become more "transparent." This means they will reveal more clearly the results of operations and the financial condition of the company. There is likely to be an increased focus on the balance sheet and on the quality and measurement of assets and the extent and nature of liabilities as well as on a proper identification of other risks. The quality of earnings will continue to be of paramount importance. There have been too many situations where companies have had to restate their earnings for prior years because they did not properly disclose material facts or properly implement the revenue recognition and/or expense recognition principles.

An Accounting Perspective

Business Insight The Enron situation was the focus of a massive investigation that led to significant changes in corporate governance, accounting rules, and auditing procedures. Enron was formed in 1985 and became a major player in the energy industry. Its stock reached a high of about $90 per share in August 2000. Top executives began selling stock shortly thereafter, while at least for a short period during the ensuing fall in the stock's price, employees were prevented from doing so. In October of 2001, the disclosure of off-balance sheet partnerships, with attendant liabilities for Enron, resulted in a $1.2 billion write-off in stockholder's equity. In November of 2001, Enron revealed that it had overstated earnings by $586 million since 1997. In December 2001, Enron filed for the largest bankruptcy to that date. Enron stock became almost worthless, selling for under $1. Employees of Enron not only lost their jobs, but many also lost their retirement savings because they consisted largely of Enron stock. Individual and pension fund investors as a group lost billions of dollars. The state of Florida's pension fund lost about $340 million. Enron's external auditor was accused of shredding documents pertaining to Enron after the U.S. Justice Department confirmed its investigation and was indicated in March of 2002 for that action. (For more information about the Enron situation see, for instance: U.S. News & World Report, March 18 2002, pp, 26-36)

External auditors, internal auditors, audit committee members, and members of Boards of Directors are likely to ask much tougher questions of management. They are also more likely to investigate questionable transactions. Directors of Enron and WorldCom paid hefty fines averaging about $1.4 million each. Audit committees may be required to publicly disclose their activities that were performed to carry out their duties.

Management's letter to the stockholders contained in the annual report, and usually signed by the CEO, contains the views of management regarding current operations, operating results, and plans for the future. This letter is likely to become even more important in the future than it is now. There could be financial penalties if this letter is purposely misleading in that its contents are not supported by the financial statements or they misrepresent significant facts. To the extent these letters are more conservative rather than being unrealistic, individuals analyzing financial statements will be able to rely on their content to a greater extent in the future.

Financial statement analysis is going to have increasing importance. There will be more focus on the cash flow statement, covered in Chapter 11, and its "cash flow from operating activities," since this amount is considered by some to be "cash earnings." Some consider this amount to be less susceptible to manipulation than is net income.

Management may disclose in an accounting policy statement, its policies regarding their business practices and those accounting policies that were followed in preparing the financial statements. Conflicts of interest will be identified and discouraged.

Professional financial analysts, such as those working for stock brokerage firms and those employed to help evaluate possible merger and acquisition candidates, typically go "beyond the numbers" in analyzing a company. They usually visit the company, interview management, and assess the physical facilities and plans for the future. They are interested in evaluating such factors as the competence and integrity of management. Professional financial analysts form an overall impression of the company by giving all of the data and other information the "smell test." In other words, does everything seem legitimate or are there possible significant hidden factors that have not yet been identified which makes one think that something is not right.

The future looks bright. There are few companies with reporting problems like those of Enron and WorldCom. Needed changes will be made to maintain public confidence in financial reporting. Protecting the public interest should be paramount in the future.

This chapter concludes our coverage of managerial accounting. It is important to realize that it is impossible to completely separate financial and managerial accounting information into neat packages. Managers use both the published financial statements and managerial accounting information in making decisions. Also, some of the concepts covered in managerial accounting (e.g., job costing and process costing) have a direct impact on the formal financial statements.

An Accounting Perspective

Uses of Technology The *Journal of Accountancy* has published articles on Internet resources to encourage greater use of technology by accountants. Five of the articles published in that journal that are informative for those who want to learn more about the Internet and/or find additional websites regarding accounting are:

Sarah Phelan, "The Internet as an Investment Tool," August 2001, pp. 27-31.
Robert Tie, "CPA Internet Portal Gears up for Launch," April 2001, pp. 18–19.
Anonymous, "Accountants are Thriving on the Web, Says Survery," November 2000, pp. 20–23.
Stanley Zarowin, "Expanding into Syberspace," September 2000, pp. 32–35.
Anonymous, "SEC Implements EDGAR II, Stage 2," September 2000, pp. 26, 30.

You may want to investigate one or more of these articles and then visit some of the websites they list. There is no doubt that the Internet will only grow in importance in the future. The more you know about it, the more marketable you will be upon graduation.

Epilogue

You have now completed the last chapter in this text. Thank you for using our textbook. The knowledge you have gained will serve you well in any career you choose. Good luck!

Understanding the Learning Objectives

Objective 1
Describe and explain the objectives of financial statement analysis.

- A company's financial statements are analyzed internally by management and externally by investors, creditors, and regulatory agencies.
- Management's analysis of financial statements primarily relates to parts of the company. Management is able to obtain specific, special-purpose reports to aid in decision making.
- External users focus their analysis of financial statements on the company as a whole. They must rely on the general-purpose financial statements that companies publish.
- Financial statement analysis consists of applying analytical tools and techniques to financial statements and other relevant data to obtain useful information.
- This information is the significant relationships between data and trends in those data assessing the company's past performance and current financial position.
- The information is useful for making predictions that may have a direct effect on decisions made by many users of financial statements.
- Present and potential company investors use this information to assess the profitability of the firm.
- Outside parties and long-term creditors sometimes are interested in a company's solvency, and thus use the information in predicting the company's solvency.

Objective 2
Describe the sources of information for financial statement analysis.

- Published reports are one source of financial information. Published reports include financial statements, explanatory notes, letters to stockholders, reports of independent accountants, and management's discussion and analysis (MDA).
- Government reports are another source of financial information and include Form 10-K, Form 10-Q, and Form 8-K. These reports are available to the public for a small charge.
- Financial service information, business publications, newspapers, and periodicals offer meaningful financial information to external users. Moody's Investors Services; Standard & Poor's; Dun & Bradstreet, Inc.; and Robert Morris Associates all provide useful industry information. Business publications, such as *The Wall Street Journal* and *Forbes,* also report industry financial news.

Objective 3
Calculate and explain changes in financial statements using horizontal analysis, vertical analysis, and trend analysis.

- Horizontal analysis is the calculation of dollar changes or percentage changes in comparative statement items or totals. Use of this analysis helps detect changes in a company's performance and highlights trends.
- Vertical analysis consists of a study of a single financial statement in which each item is expressed as a percentage of a significant total. Use of this analysis is especially helpful in analyzing income statement data such as the percentage of cost of goods sold to sales or the percentage of gross margin to sales.
- Trend analysis compares financial information over time to a base year. The analysis is calculated by:
  1. Selecting a base year or period.
  2. Assigning a weight of 100% to the amounts appearing on the base-year financial statements.
  3. Expressing the corresponding amounts shown on the other years' financial statements as a percentage of base-year or period amounts. The percentages are computed by dividing nonbase-year amounts by the corresponding base-year amounts and then multiplying the results by 100.

  Trend analysis indicates changes that are taking place in an organization and highlights the direction of these changes.

Objective 4
Perform ratio analysis on financial statements using liquidity ratios, long-term solvency ratios, profitability tests, and market tests.

- **Liquidity ratios** indicate a company's short-term debt-paying ability. These ratios include (1) current, or working capital, ratio; (2) acid-test (quick) ratio; (3) cash flow liquidity ratio; (4) accounts receivable turnover; (5) number of days' sales in accounts receivable; (6) inventory turnover; and (7) total assets turnover.
- **Equity, or long-term solvency, ratios** show the relationship between debt and equity financing in a company. These ratios include (1) equity (stockholders' equity) ratio and (2) stockholders' equity to debt ratio.
- **Profitability tests** are an important measure of a company's operating success. These tests include (1) rate of return on operating assets, (2) net income to net sales, (3) net income to average common stockholders' equity, (4) cash flow margin, (5) earnings per share of common stock, (6) times interest earned ratio, and (7) times preferred dividends earned ratio.
- **Market tests** help investors and potential investors assess the relative merits of the various stocks in the marketplace. These tests include (1) earnings yield on common stock, (2) price-earnings ratio, (3) dividend yield on common stock, (4) payout ratio on common stock, (5) dividend yield on preferred stock, and (6) cash flow per share of common stock.
- For a complete summary and a graphic depiction of all liquidity, long-term solvency, profitability, and market test ratios, see Illustrations 12.9 and 12.10.

Campfire queen
Cycling champion
Sentimental geologist*

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Objective 5
Describe the considerations used in financial statement analysis.

- **Need for comparative data:** Analysts must be sure that their comparisons are valid—especially when the comparisons are of items for different periods or different companies.
- **Influence of external factors:** A single important event, such as the unexpected placing of a product on the market by a competitor, may affect the interpretation of the financial statements. Also, the general business conditions and the possible seasonal nature of the business must be taken into consideration, since these factors could have an impact on the financial statements.
- **Impact of inflation:** Since financial statements fail to reveal the impact of inflation on the reporting entity, one must make sure that the items being compared are all comparable; that is, the impact of inflation has been taken into consideration.
- **Need for comparative standards:** In financial statement analysis, remember that standards for comparison vary by industry, and financial analysis must be carried out with knowledge of specific industry characteristics.

Demonstration Problem 12–A

Kellogg Company
Kellogg Company is one of the world's largest breakfast cereal companies.

Comparative financial statements of Kellogg Company for 2000 and 1999 follow:

KELLOGG COMPANY
Comparative Income Statements
For the Years Ended December 31, 2000, and 1999
($ millions)

	2000	1999
Net revenues	$6,954.7	$6,984.2
Cost of goods sold	3,327.0	3,325.1
Gross margin	$3,627.7	$3,659.1
Operating expense	2,551.4	2,585.7
Nonoperating expense (interest)	137.5	118.8
Income before income taxes	$ 938.8	$ 954.6
Income taxes	280.0	198.4
Net earnings	$ 658.8	$ 756.2

KELLOGG COMPANY
Comparative Balance Sheets
December 31, 2000, and 1999
($ millions)

	2000	1999
Assets		
Cash and temporary investments	$ 204.4	$ 150.6
Accounts receivable, net	685.3	678.5
Inventories	443.8	503.8
Other current assets	273.3	236.3
Property, net	2,526.9	2,640.9
Other assets	762.6	589.6
Total assets	$4,896.3	$4,808.7
Liabilities and Stockholders' Equity		
Current liabilities	$2,492.6	$1,587.8
Long-term liabilities	1,506.2	2,407.7
Common stock	103.8	103.8
Capital in excess of par value	102.0	104.5
Retained earnings	1,501.0	1,317.2
Treasury stock	(374.0)	(380.9
Currency translation adjustment	(435.3)	(331.4
Total liabilities and stockholders' equity	$4,896.3	$4,808.7

a. Prepare comparative common-size income statements for 2000 and 1999.
b. Perform a horizontal analysis of the comparative balance sheets.

Solution to Demonstration Problem 12–A

a.

KELLOGG COMPANY
Common-Size Comparative Income Statements
For the Year Ended December 31, 2000, and 1999

	Percent	
	2000	**1999**
Net revenues	100.00 %	100.00 %
Cost of goods sold	47.84	47.61
Gross margin	52.16 %	52.39
Operating expenses	36.69	37.02
Nonoperating expense (interest)	1.98	1.70
Income before income taxes	13.49 %*	13.67 %
Income taxes	4.03	2.84
Net earnings	9.46 %*	10.83 %

*Difference due to rounding.

b.

KELLOGG COMPANY
Comparative Balance Sheets
December 31, 2000, and 1999
($ millions)

			Increase or Decrease	
	2000	**1999**	**2000 Amount**	**1999 Percent**
Assets				
Cash and temporary investments	$204.4	$150.6	$ 53.8	35.72 %
Accounts receivable, net	685.3	678.5	6.8	1.00
Inventories	443.8	503.8	(60.0)	(11.91)
Other current assets	273.3	236.3	37.0	15.66
Property, net	2,526.9	2,640.9	(114.0)	(4.32)
Other assets	762.6	589.6	164.0	27.40
Total assets	$4,896.3	$4,808.7	$ 87.6	1.82 %
Liabilities and Stockholders' Equity				
Current liabilities	$2,492.6	$ 1,587.8	$ 904.8	56.98 %
Long-term liabilities	1,506.2	2,407.7	(901.5)	(37.44)
Common stock	103.8	103.8	0.0	0.0
Capital in excess of par value	102.0	104.5	(2.5)	(2.39)
Retained earnings	1,501.0	1,317.2	183.8	13.95
Treasury stock	(374.0)	(380.9)	6.9	(1.81)
Currency translation adjustment	(435.3)	(331.4)	(103.9)	31.35
Total liabilities and stockholders' equity	$4,896.3	$4,808.7	$ 87.6	1.82 %

Demonstration Problem 12–B

Xerox
Xerox Corporation is a global enterprise serving the document processing market.

The balance sheet and supplementary data for Xerox Corporation follow:

XEROX CORPORATION
Balance Sheet with IOFS on an Equity Basis
December 31, 2000
($ millions)

	2000
Assets	
Cash	$ 1,741
Accounts receivable, net	2,281
Finance receivables, net	5,097
Inventories	1,932
Deferred taxes and other current assets	1,971
Total current assets	$ 13,022
Finance receivables due after one year, net	7,957
Land, buildings, and equipment, net	2,495
Investments in affiliates, at equity	1,362
Goodwill	1,578
Other assets	3,061
Total assets	$ 29,475
Liabilities and Stockholders' Equity	
Short-term debt and current portion of long-term debt	$ 2,693
Accounts payable	1,033
Accrued compensation and benefit costs	662
Unearned income	250
Other current liabilities	1,630
Total current liabilities	$ 6,268
Long-term debt	15,404
Liabilities for postretirement medical benefits	1,197
Deferred taxes and other liabilities	1,876
Discontinued policyholders' deposits and other operations liabilities	670
Deferred ESOP benefits	(221)
Minorities' interests in equity of subsidiaries	141
Preferred stock	647
Common shareholders' equity (108.1 million)	3,493
Total liabilities and shareholders' equity	$ 29,475

Supplementary data for 2000 (in millions)

1. Cost of goods sold, $6,197.
2. Net sales, $18,701.
3. Inventory, January 1, $2,290.
4. Net interest expense, $1,031.
5. Net income before interest and taxes, $647.
6. Net accounts receivable on January 1, $2,633.
7. Total assets on January 1, $28,531.

Required ➲

Compute the following ratios:

a. Current ratio.
b. Acid-test ratio.
c. Accounts receivable turnover.
d. Inventory turnover.
e. Total assets turnover.
f. Equity ratio.
g. Times interest earned ratio.

Solution to Demonstration Problem 12–B

a. Current ratio:

$$\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\$13{,}022{,}000{,}000}{\$6{,}268{,}000{,}000} = 2.08{:}1$$

b. Acid-test ratio:

$$\frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{\$9{,}119{,}000{,}000}{\$6{,}268{,}000{,}000} = 1.45{:}1$$

c. Accounts receivable turnover:

$$\frac{\text{Net sales}}{\text{Average net accounts receivable}} = \frac{\$18{,}701{,}000{,}000}{\$2{,}457{,}000{,}000} = 7.61 \text{ times}$$

d. Inventory turnover:

$$\frac{\text{Cost of goods sold}}{\text{Average inventory}} = \frac{\$6{,}197{,}000{,}000}{\$2{,}111{,}000{,}000} = 2.94 \text{ times}$$

e. Total assets turnover:

$$\frac{\text{Net sales}}{\text{Average total assets}} = \frac{\$18{,}701{,}000{,}000}{\$29{,}003{,}000{,}000} = .64 \text{ times}$$

f. Equity ratio:

$$\frac{\text{Stockholders' equity}}{\text{Total assets}} = \frac{\$4{,}140{,}000{,}000}{\$29{,}475{,}000{,}000} = 14.05\%$$

g. Times interest earned ratio:

$$\frac{\text{Income before interest and taxes}}{\text{Interest expense}} = \frac{\$647{,}000{,}000}{\$1{,}031{,}000{,}000} = .63 \text{ times}$$

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* Undergraduate and graduate borrowers may borrow annually up to the lesser of the cost of attendance or $30,000 ($40,000 for certain schools where it has been determined that the annual cost of attendance exceeds $30,000). Borrowers in the Continuing Education loan program may borrow annually up to $30,000.

** Undergraduate students may choose to defer repayment until six months after graduation or ceasing to be enrolled at least half time in school. Interest only and immediate repayment options also available.

*** A 0.25% interest rate reduction is available for borrowers who elect to have monthly principal and interest payments transferred electronically from a savings or checking account. The interest rate reduction will begin when automatic principal and interest payments start, and will remain in effect as long as automatic payments continue without interruption. This reduced interest rate will return to contract rate if automatic payments are cancelled, rejected or returned for any reason. Upon request, borrowers are also entitled to an additional 0.25% interest rate reduction if (1) the first 36 payments of principal and interest are paid on time, and (2) at any time prior to the 36th on time payment, the borrower who receives the monthly bill elects to have monthly principal and interest payments transferred electronically from a savings or checking account, and continues to make such automatic payments through the 36th payment. This reduced interest rate will not be returned to contract rate if, after receiving the benefit, the borrower discontinues automatic electronic payment. The lender and servicer reserve the right to modify or discontinue borrower benefit programs (other than the co-signer release benefit) at any time without notice.

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New Terms

Accounts receivable turnover Net credit sales (or net sales) divided by average net accounts receivable. *375*
Acid-test (quick) ratio Ratio of quick assets (cash, marketable securities, and net receivables) to current liabilities. *374*
Cash flow liquidity ratio Cash and marketable securities plus net cash provided by operating activities divided by current liabilities. *375*
Cash flow margin Net cash provided by operating activities divided by net sales. *382*
Cash flow per share of common stock Net cash provided by operating activities divided by the average number of shares of common stock outstanding. *387*
Common-size statements Show only percentages and no absolute dollar amounts. *367*
Comparative financial statements Present the same company's financial statements for two or more successive periods in side-by-side columns. *367*
Current ratio Also called *working capital ratio.* Current assets divided by current liabilities. *373*
Debt to equity ratio Total debt divided by stockholders' equity. *379*
Dividend yield on common stock Dividend per share of common stock divided by current market price per share of common stock. *386*
Dividend yield on preferred stock Dividend per share of preferred stock divided by current market price per share of preferred stock. *387*
Earnings per share (EPS) The amount of earnings available to common stockholders (which equals net income less preferred dividends) divided by weighted-average number of shares of common stock outstanding. *382*
Earnings yield on common stock Ratio of current EPS to current market price per share of common stock. *386*
Equity (stockholders' equity) ratio The ratio of stockholders' equity to total assets (or total equities). *378*
Horizontal analysis Analysis of a company's financial statements for two or more successive periods showing percentage and/or absolute changes from prior year. This type of analysis helps detect changes in a 5company's performance and highlights trends. *367*
Inventory turnover Cost of goods sold divided by average inventory. *376*
Liquidity Company's state of possessing liquid assets, such as (1) cash and (2) other assets that will 5soon be converted to cash. *366*
Net income to net sales Net income divided by net sales. *380*
Net operating income Income before interest and taxes. *379*
Nonoperating assets Assets owned by a company but not used in producing operating revenues. *380*
Nonoperating income elements Elements excluded from net operating income because they are not directly related to operations; includes such elements as extraordinary items, cumulative effect on prior year of changes in accounting principle, losses or gains from discontinued operations, interest revenue, and interest expense. *379*
Number of days' sales in accounts receivable The number of days in a year (365) divided by the accounts receivable turnover. Also called the average collection period for accounts receivable. *376*
Operating assets All assets actively used in producing operating revenues. *380*
Operating margin Net operating income divided by net sales. *379*
Payout ratio on common stock The ratio of dividends per share of common stock divided by EPS. *386*
Price-earnings ratio The ratio of current market price per share of common stock divided by the EPS of the stock. *386*
Rate of return on operating assets (Net operating income ÷ Net sales) × (Net sales ÷ Operating assets). Result is equal to net operating income divided by operating assets. *379*
Return on average common stockholders' equity Net income divided by average common stockholders' equity; often called rate of return on average common stockholders' equity, or simply return on equity (ROE). *381*
Return on equity (ROE) Net income divided by average common stockholders' equity. *381*
Stockholders' equity to debt ratio Stockholders' equity divided by total debt; often used in inverted form and called the debt to equity ratio. *379*
Times interest earned ratio A ratio computed by dividing income before interest and taxes by interest expense (also called interest coverage ratio). *385*
Times preferred dividends earned ratio Net income divided by annual preferred dividends. *385*
Total assets turnover Net sales divided by average total assets. *377*
Trend percentages Similar to horizontal analysis except that a base year or period is selected, and comparisons are made to the base year or period. *367*
Turnover The relationship between the amount of an asset and some measure of its use. See *accounts receivable turnover, inventory turnover, and total assets turnover*. *275*

Turnover of operating assets Net sales divided by operating assets. *380*

Vertical analysis The study of a single financial statement in which each item is expressed as a percentage of a significant total; for example, percentages of sales calculations. *367*

Yield (on stock) The yield on a stock investment refers to either an earnings yield or a dividend yield. Also see Earnings yield on common stock and Dividend yield on common stock and preferred stock. *385*

Self-Test

True-False

Indicate whether each of the following statements is true or false.

1. An objective of financial statement analysis is to provide information about the company's past performance and current financial position.
2. Vertical analysis helps detect changes in a company's performance over several periods and highlights trends.
3. Common-size statements provide information about changes in dollar amounts relative to the previous periods.
4. Liquidity ratios show a company's capacity to pay maturing current liabilities.
5. A company that is quite profitable may find it difficult to pay its accounts payable.
6. Financial statement analysts must be sure that comparable data are used among companies to make the comparisons valid.

Multiple-Choice

Select the best answer for each of the following questions.

The following data were abstracted from the December 31, 2004, balance sheet of Andrews Company (use for questions 1 and 2):

Cash	$136,000
Marketable securities	64,000
Accounts and notes receivable, net	184,000
Merchandise inventory	244,000
Prepaid expenses	12,000
Accounts and notes payable, short term	256,000
Accrued liabilities	64,000
Bonds payable, long term	400,000

1. The current ratio is:
- **a.** 1:2.
- **b.** 2:1.
- **c.** 1.2:1.
- **d.** 3:1.

2. The acid-test ratio is:
- **a.** 1:2.
- **b.** 2:1.
- **c.** 1.2:1.
- **d.** 3:1.

Benson Company shows the following data on its 2008 financial statements (use for questions 12–5):

Accounts receivable, January 1	$720,000
Accounts receivable, December 31	960,000
Merchandise inventory, January 1	900,000
Merchandise inventory, December 31	1,020,000
Gross sales	4,800,000
Sales returns and allowances	180,000
Net sales	4,620,000
Cost of goods sold	3,360,000
Income before interest and taxes	720,000
Interest on bonds	192,000
Net income	384,000

3. The accounts receivable turnover is:
- **a.** 5.5 times per year.
- **b.** 5.714 times per year.
- **c.** 5 times per year.
- **d.** 6.667 times per year.

4. The inventory turnover is:
- **a.** 5 times per year.
- **b.** 4.8125 times per year.
- **c.** 3.5 times per year.
- **d.** 4 times per year.

5. The times interest earned ratio is:
- **a.** 4.75 times per year.
- **b.** 3.75 times per year.
- **c.** 2 times per year.
- **d.** 3 times per year.

Now turn to page 415 to check your answers.

Questions

1. What are the major sources of financial information for publicly owned corporations?
2. The higher the accounts receivable turnover rate, the better off the company is. Do you agree? Why?
3. Can you think of a situation where the current ratio is very misleading as an indicator of short-term, debt-paying ability? Does the acid-test ratio offer a remedy to the situation you have described? Describe a situation where the acid-test ratio does not suffice either.
4. Before the Marvin Company issued $20,000 of long-term notes (due more than a year from the date of issue) in exchange for a like amount of accounts payable, its current ratio was 2:1 and its acid-test ratio was 1:1. Will this transaction increase, decrease, or have no effect on the current ratio and acid-test ratio? What would be the effect on the equity ratio?
5. Through the use of turnover rates, explain why a firm might seek to increase the volume of its sales even though such an increase can be secured only at reduced prices.
6. Indicate which of the relationships illustrated in the chapter would be best to judge:
   - **a.** The short-term debt-paying ability of the firm.
   - **b.** The overall efficiency of the firm without regard to the sources of assets.
   - **c.** The return to owners (stockholders) of a corporation.
   - **d.** The safety of long-term creditors' interest.
   - **e.** The safety of preferred stockholders' dividends.
7. Indicate how each of the following ratios or measures is calculated:
   - **a.** Payout ratio.
   - **b.** Earnings per share of common stock.
   - **c.** Price-earnings ratio.
   - **d.** Earnings yield on common stock.
   - **e.** Dividend yield on preferred stock.
   - **f.** Times interest earned.
   - **g.** Times preferred dividends earned.
   - **h.** Return on average common stockholders' equity.
   - **i.** Cash flow margin.
8. How is the rate of return on operating assets determined? Is it possible for two companies with operating margins of 5% and 1%, respectively, to both have a rate of return of 20% on operating assets? How?
9. Cite some of the possible deficiencies in accounting information, especially regarding its use in analyzing a particular company over a 10-year period.
10. **Real World Question** From the Consolidated Statements of Income of The Limited in the Annual Report Appendix, determine the percentage change in operating income from 1999 to 2000.
11. **Real World Question** From the Consolidated Statements of Income of The Limited in the Annual Report Appendix, determine the 2000 net income per common share.
12. **Real World Question** From the financial statements of The Limited in the Annual Report Appendix, determine the 2000 cash dividends per common share.
13. **Real World Question** From the financial statements of The Limited in the Annual Report Appendix, determine the 2000 cash flow margin.

Exercises

Exercise 12–1
Perform horizontal and vertical analysis (L.O 3)

Income statement data for Boston Company for 2008 and 2007 follow:

	2008	2007
Net sales	$2,610,000	$1,936,000
Cost of goods sold	1,829,600	1,256,400
Selling expenses	396,800	350,000
Administrative expenses	234,800	198,400
Federal income taxes	57,600	54,000

Prepare a horizontal and vertical analysis of the income data in a form similar to Illustration 12.2. Comment on the results of this analysis.

Exercise 12–2
Determine effects of various transactions on the current ratio (L.O 4)

A company engaged in the following three independent transactions:

1. Merchandise purchased on account, $2,400,000.
2. Machinery purchased for cash, $2,400,000.
3. Capital stock issued for cash, $2,400,000.
   a. Compute the current ratio after each of these transactions assuming current assets were $3,200,000 and the current ratio was 1:1 before the transactions occurred.
   b. Repeat part **a** assuming the current ratio was 2:1.
   c. Repeat part **a** assuming the current ratio was 1:2.

Exercise 12–3
Compute average number of days receivables are outstanding; determine effect of increase in turnover (L.O 4)

A company has sales of $3,680,000 per year. Its average net accounts receivable balance is $920,000.

a. What is the average number of days accounts receivable are outstanding?
b. By how much would the capital invested in accounts receivable be reduced if the turnover could be increased to 6 without a loss of sales?

Exercise 12–4
Compute cash flow margin (L.O 4)

Columbia Corporation had the following selected financial data for December 31, 2006:
Net cash provided by operating activities

Net sales	$1,800,000
Cost of goods sold	1,080,000
Operating expenses	315,000
Net income	195,000
Total assets	1,000,000
Net cash provided by operating activities	25,000

Compute the cash flow margin.

Exercise 12–5
Compute inventory turnover (L.O 4)

From the following partial income statement, calculate the inventory turnover for the period.

Net Sales		$2,028,000
Cost of goods sold:		
Beginning inventory	$ 234,000	
Purchases	1,236,000	
Cost of goods available for sale	$1,560,000	
Less: Ending inventory	265,200	
Cost of goods sold		1,294,800
Gross margin		$ 733,200
Operating expenses		327,600
Net operating income		$ 405,600

Exercise 12–6
Compute rate of return on operating assets (L.O 4)

Eastern, Inc., had net sales of $3,520,000, gross margin of $1,496,000, and operating expenses of $904,000. Total assets (all operating) were $3,080,000. Compute Eastern's rate of return on operating assets.

Exercise 12–7
Compute return on common stockholders' equity (L.O 4)

Nelson Company began the year 2007 with total stockholders' equity of $2,400,000. Its net income for 2007 was $640,000, and $106,800 of dividends were declared. Compute the rate of return on average stockholders' equity for 2007. No preferred stock was outstanding.

Exercise 12–8
Compute EPS (L.O 4)

Rogers Company had 60,000 shares of common stock outstanding on January 1, 2007. On April 1, 2007, it issued 20,000 additional shares for cash. The amount of earnings available for common stockholders for 2007 was $600,000. What amount of EPS of common stock should the company report?

Exercise 12–9
Compute weighted-average number of shares outstanding (L.O 4)

Smith Company started 2008 with 800,000 shares of common stock outstanding. On March 31, it issued 96,000 shares for cash, and on September 30, it purchased 80,000 shares of its own stock for cash. Compute the weighted-average number of common shares outstanding for the year.

Exercise 12–10
Compute EPS for current and prior year (L.O 4)

A company reported EPS of $2 (or $2,400,000/1,200,000 shares) for 2006, ending the year with 1,200,000 shares outstanding. In 2007, the company earned net income of $7,680,000, issued 320,000 shares of common stock for cash on September 30, and distributed a 100% stock dividend on December 31, 2007. Compute EPS for 2007, and compute the adjusted earnings per share for 2006 that would be shown in the 2007 annual report.

Exercise 12–11
Compute times interest earned (L.O 4)

A company paid interest of $32,000, incurred federal income taxes of $88,000, and had net income (after taxes) of $112,000. How many times was interest earned?

Exercise 12–12
Compute times dividends earned and dividend yield (L.O 4)

John Company had 20,000 shares of $600 par value, 8% preferred stock outstanding. Net income after taxes was $5,760,000. The market price per share was $720.

a. How many times were the preferred dividends earned?
b. What was the dividend yield on the preferred stock assuming the regular preferred dividends were declared and paid?

Exercise 12–13
Compute EPS and price-earnings ratio (L.O 4)

A company had 80,000 weighted-average number of shares of $320 par value common stock outstanding. The amount of earnings available to common stockholders was $800,000. Current market price per share is $720. Compute the EPS and the price-earnings ratio.

Problems

Problem 12–1
Perform horizontal and vertical analysis and comment on the results (L.O 3)

Loom's comparative statements of income and retained earnings for 2007 and 2006 are given below.

LOOM
Consolidated Statement of Earnings
For the Years Ended December 31, 2007, and 2006
($ Thousands, except per data share)

	December 31	
	(1) 2007	**(2) 2006**
Net sales	$ 2,403,100	$ 2,297,800
Cost of sales	1,885,700	1,651,300
Gross earnings	$ 517,400	$ 646,500
Selling, general and administrative expenses	429,700	376,300
Goodwill amortization	37,300	35,200
Impairment writedown of goodwill	158,500	0
Operating earnings (loss)	$ (108,100)	$235,000
Interest expense	(116,900)	(95,400)
Other expense-net	(21,700)	(6,100)
Earnings (loss) before income tax (benefit) expense, extraordinary item and cumulative effect of change in accounting principles	$ (246,700)	$133,500
Income tax (benefit) expense	(19,400)	73,200
Earnings (loss) before cumulative effect of change in accounting principles	$ (227,300)	$60,300
Cumulative effect of change in accounting principles:		
Pre-operating costs	(5,200)	0
Net earnings (loss)	$ (232,500)	$60,300
Retained earnings, January 1	680,600	620,300
	$ 448,100	$680,600
Dividends	0	0
Retained earnings, December 31	$ 448,100	$680,600

LOOM
Consolidated Balance Sheet
As of December 31, 2007, and 2006
($ Thousands)

	December 31	
	(1) 2007	(2) 2006
Assets		
Current Assets		
Cash and cash equivalents	$ 26,500	$ 49,400
Notes and accounts receivable (less allowance for possible losses of $26,600,000 and $20,700,000, respectively)	261,000	295,600
Inventories		
Finished goods	522,300	496,200
Work in process	132,400	141,500
Materials and supplies	44,800	39,100
Other	72,800	54,800
Total current assets	$ 1,059,800	$ 1,076,600
Property, Plant, and Equipment		
Land	$ 20,100	$ 19,300
Buildings, structures and improvements	486,400	435,600
Machinery and equipment	1,076,600	1,041,300
Construction in progress	24,200	35,200
Total property, plant and equipment	$ 1,607,300	$ 1,531,400
Less accumulated depreciation	578,900	473,200
Net property, plant and equipment	$ 1,028,400	$ 1,058,200
Other Assets		
Goodwill (less accumulated amortization of $257,800,000 and $242,400,000, respectively).	$ 771,100	$ 965,800
Other	60,200	62,900
Total other assets	$ 831,300	$ 1,028,700
Total assets	$ 2,919,500	$ 3,163,500
Liabilities and Stockholders' Equity		
Current Liabilities		
Current maturities of long-term debt	$ 14,600	$ 23,100
Trade accounts payable	60,100	113,300
Accrued insurance obligations	38,800	23,600
Accrued advertising and promotion	23,800	23,400
Interest payable	16,000	18,300
Accrued payroll and vacation pay	15,300	33,100
Accrued pension	11,300	19,800
Other accounts payable and accrued expenses	123,900	77,200
Total current liabilities	$ 303,800	$ 331,800
Noncurrent Liabilities		
Long-term debt	1,427,200	1,440,200
Net deferred income taxes	0	43,400
Other	292,900	222,300
Total noncurrent liabilities	$ 1,720,100	$ 1,705,900
Total liabilities	$ 2,023,900	$ 2,037,700
Common Stockholders' Equity		
Common stock and capital in excess of par value, $.01 par value; authorized, Class A, 200,000,000 shares, Class B, 30,000,000 shares; issued and outstanding:		
Class A Common Stock, 69,268,701 and 69,160,349 shares, respectively	$ 465,600	$ 463,700
Class B Common Stock, 6,690,976 shares	4,400	4,400
Retained earnings	448,100	680,600
Currency translation and minimum pension liability adjustments	(22,500)	(22,900)
Total common stockholders' equity	$ 895,600	$ 1,125,800
Total liabilities and stockholders' equity	$ 2,919,500	$ 3,163,500

Required

a. Perform a horizontal and vertical analysis of Loom's financial statements in a manner similar to those illustrated in this chapter.
b. Comment on the results of the analysis in **a.**

Problem 12–2
Perform trend analysis and comment on the results (L.O 3)

Deere & Company manufactures, distributes, and finances a full range of agricultural equipment; a broad range of industrial equipment for construction, forestry, and public works; and a variety of lawn and grounds care equipment. The company also provides credit, health care, and insurance products for businesses and the general public. Consider the following information from the Deere & Company 2000 Annual Report:

(in millions)	1997	1998	1999	2000
Sales	$12,791	$13,822	$11,751	$13,137
Cost of goods sold	8,481	9,234	8,178	8,936
Gross margin	4,310	4,588	3,573	4,201
Operating expenses	2,694	2,841	3,021	3,236
Net operating income	$ 1,616	$ 1,747	$ 552	$ 965

Required

a. Prepare a statement showing the trend percentages for each item using 1997 as the base year.
b. Comment on the trends noted in part **a**.

Problem 12–3
Compute working capital, current ratio, and acid-test ratio (L.O 4)

The following data are for Toy Company:

	December 31	
	2008	2007
Allowance for uncollectible accounts	$72,000	$57,000
Prepaid expenses	34,500	45,000
Accrued liabilities	210,000	186,000
Cash in Bank A	1,095,000	975,000
Wages payable	–0–	37,500
Accounts payable	714,000	585,000
Merchandise inventory	1,342,500	1,437,000
Bonds payable, due in 2005	615,000	594,000
Marketable securities	217,500	147,000
Notes payable (due in six months)	300,000	195,000
Accounts receivable	907,500	870,000
Cash flow from operating activities	192,000	180,000

a. Compute the amount of working capital at both year-end dates.
b. Compute the current ratio at both year-end dates.
c. Compute the acid-test ratio at both year-end dates.
d. Compute the cash flow liquidity ratio at both year-end dates.
e. Comment briefly on the company's short-term financial position.

Problem 12–4
Determine effects of various transactions on working capital and current ratio (L.O 4)

On December 31, 2008, Energy Company's current ratio was 3:1 before the following transactions were completed:

1. Purchased merchandise on account.
2. Paid a cash dividend declared on November 15, 2008.
3. Sold equipment for cash.
4. Temporarily invested cash in trading securities.
5. Sold obsolete merchandise for cash (at a loss).
6. Issued 10-year bonds for cash.
7. Wrote off goodwill to retained earnings.
8. Paid cash for inventory.
9. Purchased land for cash.
10. Returned merchandise that had not been paid for.
11. Wrote off an account receivable as uncollectible. Uncollectible amount is less than the balance in the Allowance for Uncollectible Accounts.
12. Accepted a 90-day note from a customer in settlement of customer's account receivable.
13. Declared a stock dividend on common stock.

Consider each transaction independently of all the others.

a. Indicate whether the amount of working capital will increase, decrease, or be unaffected by each of the transactions.
b. Indicate whether the current ratio will increase, decrease, or be unaffected by each of the transactions.

Problem 12–5
Compute rate of return on operating assets and demonstrate effects of various transactions on this rate of return (L.O 4)

Digital Company has net operating income of $500,000 and operating assets of $2,000,000. Its net sales are $4,000,000.

The management accountant for the company computes the rate of return on operating assets after computing the operating margin and the turnover of operating assets.

a. Show the computations the management accountant made.
b. Indicate whether the operating margin and turnover increase or decrease after each of the following changes. Then determine what the actual rate of return on operating assets would be. The events are not interrelated; consider each separately, starting from the original earning power position. No other changes occurred.
   (1) Sales increased by $160,000. There was no change in the amount of operating income and no change in operating assets.
   (2) Management found some cost savings in the manufacturing process. The amount of reduction in operating expenses was $40,000. The savings resulted from the use of less materials to manufacture the same quantity of goods. As a result, average inventory was $16,000 lower than it otherwise would have been. Operating income was not affected by the reduction in inventory.
   (3) The company invested $80,000 of cash (received on accounts receivable) in a plot of land it plans to use in the future (a nonoperating asset); income was not affected.
   (4) The federal income tax rate increased and caused income tax expense to increase by $20,000. The taxes have not yet been paid.
   (5) The company issued bonds and used the proceeds to buy $400,000 of machinery to be used in the business. Interest payments are $20,000 per year. Net operating income increased by $100,000 (net sales did not change).

Problem 12–6
Compute EPS, rate of return on sales and stockholders' equity, and number of times interest earned for two years (L.O 4)

Polaroid Corporation designs, manufactures, and markets worldwide instant photographic cameras and films, electronic imaging recording devices, conventional films, and light polarizing filters and lenses. The following information is for Polaroid:

(in millions)	**2000**	**1999**
Net sales	$13,994	$14,089
Income before interest and taxes	2,310	2,251
Net income	1,407	1,392
Interest expense	178	142
Stockholders' equity (on December 31, 1998, $3,988)	3,428	3,912
Common stock, par value $1, December 31	978	978

Compute the following for both 2000 and 1999. Then compare and comment.

a. EPS of common stock.
b. Net income to net sales.
c. Net income to average common stockholders' equity.
d. Times interest earned ratio.

Problem 12–7
Compute numerous standard ratios (L.O 4)

The Walt Disney Company operates several ranges of products from theme parks and resorts to broadcasting and other creative content. The following balance sheet and supplementary data are for The Walt Disney Company for 2000.

THE WALT DISNEY COMPANY
Consolidated Balance Sheet
For September 30, 2000
($ millions)

Assets		
Cash and cash equivalents		$ 842
Receivables		3,599
Inventories		702
Film and television costs		1,162
Other		1,258
Total current costs		$7,563
Film and television costs		5,339
Investments		2,270
Theme Parks, Resorts, and other property, at cost		
Attractions, buildings and equipment	$16,610	
Accumulated depreciation	(6,892)	
		9,718
Project in process		1,995
Land		597
Intangible Assets, net		16,117
Other Assets		1,428
Total Assets		$45,027
Liabilities and Stockholders' Equity		
		$
Accounts Payable and other accrued liabilities		5,161
Current portion of borrowing		2,502
Unearned royalties		739
Total current liabilities		$ 8,402
Borrowings		6,959
Deferred Income Taxes		2,833
Other long-term liabilities		2,377
Minority interest		356
Common shareholders' equity		
Common shares ($.01 par value)	$12,101	
Retained Earnings	12,767	
Cumulative translation and other adjustments	(28)	
Treasury shares	(740)	24,100
Total Liabilities and Stockholders' Equity		$45,027

Supplementary data required for 2000 (in millions)

1. Net income, $920.
2. Income before interest and taxes, $3,231.
3. Cost of goods sold, $21,321.
4. Net sales, $25,402.
5. Inventory on September 30, 1999, $796.
6. Total interest expense for the year, $598.

Required

Calculate the following ratios and show your computations. For calculations normally involving averages, such as average stockholders' equity, use year-end amounts unless the necessary information is provided.

a. Current ratio.
b. Net income to average common stockholders' equity.
c. Inventory turnover.
d. Number of days' sales in accounts receivable (assume 365 days in 2000).
e. EPS of common stock (ignore treasury stock).
f. Times interest earned ratio.
g. Equity ratio.
h. Net income to net sales.
i. Total assets turnover.
j. Acid-test ratio.

Problem 12–8
Determine effects on ratios of change in accounting method (FIFO to LIFO) (L.O 4)

Cooper Company currently uses the FIFO method to account for its inventory but is considering a switch to LIFO before the books are closed for the year. Selected data for the year are:

Merchandise inventory, January 1	$1,430,000
Current assets	3,603,600
Total assets (operating)	5,720,000
Cost of goods sold (FIFO)	2,230,800
Merchandise inventory, December 31 (LIFO)	1,544,400
Merchandise inventory, December 31 (FIFO)	1,887,600
Current liabilities	1,144,000
Net sales	3,832,400
Operating expenses	915,200

Required

a. Compute the current ratio, inventory turnover ratio, and rate of return on operating assets assuming the company continues using FIFO.

b. Repeat part **a** assuming the company adjusts its accounts to the LIFO inventory method.

Alternate Problems

Problem 12–1A
Perform horizontal and vertical analysis and comment on the results (L.O 3)

Steel Corporation's comparative statements of income and retained earnings and consolidated balance sheet for 2007 and 2006 follow.

STEEL CORPORATION
Consolidated Statement of Earnings
For the Years Ended December 31, 2007, and 2006
($ thousands)

	December 31	
	(1) 2007	**(2) 2006**
Net sales	$4,876.5	$4,819.4
Costs and Expenses:		
Cost of sales	$4,202.8	$4,287.3
Depreciation	284.0	261.1
Estimated restructuring losses	111.8	137.4
Total Costs	$4,598.6	$4,685.8
Income from operations	$ 268.9	$ 133.6
Financing income (expense):		
Interest and other income	7.7	7.1
Interest and other financing costs	(60.0)	(46.2)
Loss before Income Taxes and Cumulative Effect of Changes in Accounting	$ 216.6	$ 94.5
Benefit (Provision) for Income Taxes	(37.0)	(14.0)
Net earning (loss)	$ 179.6	$ 80.5
Retained Earnings, January 1	(859.4)	(939.9)
	$ (679.8)	$ (859.4)
Dividends	0.0	0.0
Retained Earnings, December 31	$ (679.8)	$ (859.4)

STEEL CORPORATION
Consolidated Balance Sheet
As of December 31, 2007, and 2006

	December 31	
	(1) 2007	**(2) 2006**
Assets		
Current Assets		
Cash and cash equivalents	$ 180.0	$ 159.5
Receivables	374.6	519.5
Total	$ 554.6	$ 679.0
Inventories		
Raw materials and supplies	$ 335.5	$ 331.9
Finished and semifinished products	604.9	534.9
Contract work in process less billings of $10.9 and $2.3	17.8	16.1
Total inventories	$ 958.2	$ 882.9
Other current assets	$ 13.0	$ 7.2
Total current assets	$ 1,525.8	$ 1,569.1
Property, Plant and Equipment less accumulated depreciation of $4329.5 and $4167.8	$ 2,714.2	$ 2,759.3
Investments and Miscellaneous Assets	112.3	124.2
Deferred Income Tax Asset – net	885.0	903.2
Intangible Asset – Pensions	463.0	426.6
Total Assets	$ 5,700.3	$ 5,782.4
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	$ 381.4	$ 387.0
Accrued employment costs	208.0	165.8
Postretirement benefits other than pensions	150.0	138.0
Accrued taxes	72.4	67.6
Debt and capital lease obligations	91.5	88.9
Other current liabilities	146.3	163.9
Total current liabilities	$ 1,049.6	$ 1,011.2
Pension Liability	$ 1,115.0	$ 1,117.1
Postretirement Benefits Other Than Pensions	1,415.0	1,441.4
Long-term Debt and Capital Lease Obligations	546.8	668.4
Other	335.6	388.5
Total noncurrent liabilities	$ 3,412.4	$ 3.615.4
Total Liabilities	$ 4,462.0	$ 4,626.6
Common Stockholders' Equity		
Preferred Stock—at $1 per share par value (aggregate liquidation preference of $481.2); Authorized 20,000,000 shares	$ 11.6	$ 11.6
Preference Stock—at $1 per share par value (aggregate liquidation preference of $88.2); Authorized 20,000,000 shares	2.6	2.6
Common Stock—at $1 per share par value/Authorized 250,000,000 and 150,000,000 shares; Issued 112,699,869 and 111.882,276 shares	112.7	111.9
Held in Treasury, 1,992,189 and 1,996,715 shares at cost	(59.4)	(59.5)
Additional Paid-in Capital	1,850.6	1,948.6
Accumulated Deficit	(679.8)	(859.4)
Total common stockholders' equity	$ 1,238.3	$ 1,155.8
Total liabilities and stockholders' equity	$ 5,700.3	$ 5,782.4

Required ➲

a. Perform a horizontal and vertical analysis of Steel's financial statements in a manner similar to Illustrations 12.1 and 12.2.

b. Comment on the results obtained in part **a**.

Problem 12–2A
Perform trend analysis and comment on the results (L.O 3)

Ford Motor Company is the world's second-largest producer of cars and trucks and ranks among the largest providers of financial services in the United States. The following information pertains to Ford:
(in millions)

(in millions)	1998	1999	2000
Sales	$118,017	$135,073	$141,230
Cost of goods sold	104,616	118,985	126,120
Gross margin	$ 13,401	$ 16,088	$ 15,110
Operating expenses	7,834	8,874	9,884
Net operating income	$ 5,567	$ 7,214	$ 5,226

Required

a. Prepare a statement showing the trend percentages for each item, using 1998 as the base year.
b. Comment on the trends noted in part **a**.

Problem 12–3A
Compute working capital, current ratio, and acid-test ratio (L.O 4)

The following data are for Clock Company:
Allowance for uncollectible accounts

	December 31 2008	2007
Notes payable (due in 90 days)	$75,200	$60,000
Merchandise inventory	240,000	208,000
Cash	100,000	128,000
Marketable securities	49,600	30,000
Accrued liabilities	19,200	22,000
Accounts receivable	188,000	184,000
Accounts payable	112,000	72,000
Allowance for uncollectible accounts	24,000	15,200
Bonds payable, due 2005	156,000	160,000
Prepaid expenses	6,400	7,360
Cash flow from operating activities	60,000	40,000

Required

a. Compute the amount of working capital at both year-end dates.
b. Compute the current ratio at both year-end dates.
c. Compute the acid-test ratio at both year-end dates.
d. Compute the cash flow liquidity ratio at both year-end dates.
e. Comment briefly on the company's short-term financial position.

Problem 12–4A
Determine effects of various transactions on working capital and current ratio (L.O 4)

Tulip Products, Inc., has a current ratio on December 31, 2007, of 2:1 before the following transactions were completed:

1. Sold a building for cash.
2. Exchanged old equipment for new equipment. (No cash was involved.)
3. Declared a cash dividend on preferred stock.
4. Sold merchandise on account (at a profit).
5. Retired mortgage notes that would have matured in 2011.
6. Issued a stock dividend to common stockholders.
7. Paid cash for a patent.
8. Temporarily invested cash in government bonds.
9. Purchased inventory for cash.
10. Wrote off an account receivable as uncollectible. Uncollectible amount is less than the balance of the Allowance for Uncollectible Accounts.
11. Paid the cash dividend on preferred stock that was declared earlier.
12. Purchased a computer and gave a two-year promissory note.
13. Collected accounts receivable.
14. Borrowed from the bank on a 120-day promissory note.
15. Discounted a customer's note. Interest expense was involved.

Consider each transaction independently of all the others.

Required

a. Indicate whether the amount of working capital will increase, decrease, or be unaffected by each of the transactions.

b. Indicate whether the current ratio will increase, decrease, or be unaffected by each of the transactions.

Problem 12–5A
Compute rate of return on operating assets and demonstrate effects of various transactions on this rate of return (L.O 4)

The following selected data are for three companies:

	Operating Assets	Net Operating Income	Net Sales
Company 1	$ 1,404,000	$ 187,200	$ 2,059,200
Company 2	8,424,000	608,400	18,720,000
Company 3	37,440,000	4,914,000	35,100,000

Required

a. Determine the operating margin, turnover of operating assets, and rate of return on operating assets for each company.

b. In the subsequent year, the following changes took place (no other changes occurred):

Company 1 bought some new machinery at a cost of $156,000. Net operating income increased by $12,480 as a result of an increase in sales of $249,600.

Company 2 sold some equipment it was using that was relatively unproductive. The book value of the equipment sold was $624,000. As a result of the sale of the equipment, sales declined by $312,000, and operating income declined by $6,240.

Company 3 purchased some new retail outlets at a cost of $6,240,000. As a result, sales increased by $9,360,000, and operating income increased by $499,200.

1. Which company has the largest absolute change in:
   a. Operating margin ratio?
   b. Turnover of operating assets?
   c. Rate of return on operating assets?

2. Which one realized the largest dollar change in operating income? Explain this change in relation to the changes in the rate of return on operating assets.

Problem 12–6A
Compute EPS, rate of return on sales and stockholders' equity, and number of times interest earned for two years (L.O 4)

One of the largest spice companies in the world, McCormick & Company, Inc., produces a diverse array of specialty foods. The following information is for McCormick & Company, Inc.:

($ thousands)	2000	1999
Net sales	$2,123,500	$2,006,900
Income before interest and taxes	225,700	174,700
Net income	137,500	98,500
Interest expense	39,700	32,400
Stockholders' equity	359,300	382,400
Common stock, no par value, November 30	175,300	173,800

Assume average common shares outstanding for 2000 and 1999 are 69,600 and 72,000 (in thousands), respectively.

Required

Compute the following for both 2000 and 1999. Then compare and comment. Assume stockholders' equity for 1998 was $388,100.

a. EPS of common stock.

b. Net income to net sales.

c. Return on average common stockholders' equity.

d. Times interest earned ratio.

Problem 12–7A
Compute numerous standard ratios (L.O 4)

Parametric Technology Corporation is in the CAD/CAM/CAE industry and is the top supplier of software tools used to automate a manufacturing company. The following consolidated balance sheet and supplementary data are for Parametric for 2000:

PARAMETRIC TECHNOLOGY CORPORATION
Consolidated Balance Sheet
For September 30, 2000 (in thousands)

Assets	
Current Assets	
Cash and cash equivalents	$ 325,872
Short-term investments	22,969
Accounts Receivable, net of allowances for doubtful account of $6,270	183,804
Other current assets	95,788
Total Current Assets	$ 628,433
Marketable investments	26,300
Property and equipment, net	66,879
Other Assets	203,271
Total Assets	$ 924,883
Liabilities and Stockholders' Equity	
Current Liabilities	
Accounts payable and accrued expenses	$ 77,144
Accrued compensation	52,112
Deferred revenue	231,495
Income taxes	1,601
Total Currents Liabilities	$ 362,352
Other liabilities	33,989
Stockholders' Equity	
Preferred stock, $.01 par value; 5,000 shares authorized; none issued	
Common stock, $.01 par value; 500,000 shares authorized; 276,053 (2000) and 272,277 (1999) shares issued	2,761
Additional paid-in capital	1,641,513
Foreign currency translation adjustment	(12,629)
Accumulated deficit	(1,036,456)
Treasury stock, at cost, 6,456 (2000) and 2,113 (1999) shares	(66,647)
Total Liabilities and Stockholders' Equity	$ 924,883

Supplementary data for 2000 (in millions)

1. Net loss, ($3,980).
2. Loss before interest and taxes, ($4,700).
3. Cost of goods sold, $244,984.
4. Net sales, $928,414.
5. Total interest expense for the year, $367.
6. Weighted-average number of shares outstanding, 273,081.

Required

Calculate the following ratios and show your computations. For calculations normally involving averages, such as average accounts receivable or average stockholders' equity, use year-end amounts if the information is not available to use averages.

a. Current ratio.
b. Net income to average common stockholders' equity.
c. Number of days' sales in accounts receivable (assume 365 days in 2000).
d. EPS of common stock.
e. Times interest earned ratio.
f. Equity ratio.
g. Net income to net sales.
h. Total assets turnover.
i. Acid-test ratio.

Problem 12–8A
Determine effects on ratios of change in accounting method (FIFO to LIFO) (L.O 4)

Paper Company is considering switching from the FIFO method to the LIFO method of accounting for its inventory before it closes its books for the year. The January 1 merchandise inventory was $864,000. Following are data compiled from the adjusted trial balance at the end of the year:

Merchandise inventory, December 31 (FIFO)	$1,008,000
Current liabilities	720,000
Net sales	2,520,000
Operating expenses	774,000
Current assets 1,890,000	
Total assets (operating)	2,880,000
Cost of goods sold	1,458,000

If the switch to LIFO takes place, the December 31 merchandise inventory would be $900,000.

Required

a. Compute the current ratio, inventory turnover ratio, and rate of return on operating assets assuming the company continues using FIFO.

b. Repeat **a** assuming the company adjusts its accounts to the LIFO inventory method.

Beyond the Numbers—Critical Thinking

Business Decision Case 12–1
Compute net income, identify reason for cash increase, state main sources of financing, and indicate further analyses needed (L.O 3, 4)

The comparative balance sheets of the Darling Corporation for December 31, 2008, and 2007 follow:

DARLING CORPORATION
Comparative Balance Sheets
December 31, 2008, and 2007
($ millions)

	2008	2007
Assets		
Cash	$ 480,000	$ 96,000
Accounts receivable, net	86,400	115,200
Merchandise inventory	384,000	403,200
Plant and equipment, net	268,800	288,000
Total assets	$1,219,200	$902,400
Liabilities and Stockholders' Equity		
Accounts payable	$ 96,000	$ 96,000
Common stock	672,000	672,000
Retained earnings	451,200	134,400
Total liabilities and stockholders' equity	$1,219,200	$902,400

Based on your review of the comparative balance sheets, determine the following:

a. What was the net income for 2008 assuming there were no dividend payments?

b. What was the primary source of the large increase in the cash balance from 2007 to 2008?

c. What are the two main sources of assets for Darling Corporation?

d. What other comparisons and procedures would you use to complete the analysis of the balance sheet?

Business Decision Case 12–2
Compute turnover ratios for four years and number of days' sales in accounts receivable; evaluate effectiveness of company's credit policy (L.O 4)

As Miller Manufacturing Company's internal auditor, you are reviewing the company's credit policy. The following information is from Miller's annual reports for 2005, 2006, 2007, and 2008:

	2005	2006	2007	2008
Net accounts receivable	$ 1,080,000	$ 2,160,000	$ 2,700,000	$ 3,600,000
Net sales	10,800,000	13,950,000	17,100,000	19,800,000

Management has asked you to calculate and analyze the following in your report:

a. If cash sales account for 30% of all sales and credit terms are always 1/10, n/60, determine all turnover ratios possible and the number of days' sales in accounts receivable at all possible dates. (The number of days' sales in accounts receivable should be based on year-end accounts receivable and net credit sales.)

b. How effective is the company's credit policy?

Business Decision Case 12–3
Analyze investment alternatives (L.O 3, 4)

Wendy Prince has consulted you about the possibility of investing in one of three companies (Apple, Inc., Baker Company, or Cookie Corp.) by buying its common stock. The companies' shares are selling at about the same price. The long-term capital structures of the companies are as follows:

	Apple, Inc.	Baker Company	Cookie Corp.
Bonds with a 10% interest rate			$2,400,000
Preferred stock with a 8% dividend rate		$2,400,000	
Common stock, $10 par value	$4,800,000	2,400,000	2,400,000
Retained earnings	384,000	384,000	384,000
Total long-term equity	$5,184,000	$5,184,000	$5,184,000
Number of common shares outstanding	480,000	240,000	240,000

Prince has already consulted two investment advisers. One adviser believes that each of the companies will earn $300,000 per year before interest and taxes. The other adviser believes that each company will earn about $960,000 per year before interest and taxes. Prince has asked you to write a report covering these points:

a. Compute each of the following, using the estimates made by the first and second advisers.
   (1) Earnings available for common stockholders assuming a 40% tax rate.
   (2) EPS of common stock.
   (3) Rate of return on total stockholders' equity.

b. Which stock should Prince select if she believes the first adviser?

c. Are the stockholders as a group (common and preferred) better off with or without the use of long-term debt in the companies?

Annual Report Analysis 12–4
Analyze management's objectives and performance from the viewpoints of a creditor and an investor (L.O 3, 4)

The following selected financial data excerpted from the annual report of Appliance Corporation represents the summary information which management presented for interested parties to review:

APPLIANCE CORPORATION
Selected Financial Data
($ thousands except per share data)

	2007	2006	2005	2004	2003
Net sales	$3,039,524	$3,372,515	$2,987,054	$ 3,041,223	$2,970,626
Cost of sales	2,250,616	2,496,065	2,262,942	2,339,406	2,254,221
Income taxes	74,800	90,200	38,600	15,900	44,400
Income (loss) from continuing operations	(14,996)	151,137	51,270	(8,354)	79,017
Percent of income (loss) from continuing operations to net sales	(0.5%)	4.5%	1.7%	(0.3%)	2.7%
Income (loss) from continuing operations per share	$ (0.14)	$ 1.42	$ 0.48	$ (0.08)	$ 0.75
Dividends paid per share	0.515	0.50	0.50	0.50	0.50
Average shares outstanding (in thousands)	107,062	106,795	106,252	106,077	105,761
Working capital	$ 543,431	$ 595,703	$ 406,181	$ 452,626	$ 509,025
Depreciation of property, plant and equipment	102,572	110,044	102,459	94,032	83,352
Additions to property, plant and equipment	152,912	84,136	99,300	129,891	143,372
Total assets	2,125,066	2,504,327	2,469.498	2,501,490	2,535,068
Long-term debt	536,579	663,205	724,695	789,232	809,480
Total debt to capitalization	45.9%	50.7%	60.0%	58.7%	45.9%
Shareowners' equity per share of common stock	$ 6.05	$ 6.82	$ 5.50	$ 5.62	$ 9.50

Required

a. As a creditor, what do you believe management's objectives should be? Which of the preceding items of information would assist a creditor in judging management's performance?

b. As an investor, what do you believe management's objectives should be? Which of the preceding items of information would assist an investor in judging management's performance?

c. What other information might be considered useful?

Group Project 12–5
Analyze an annual report

Choose a company the class wants to know more about and obtain its annual report. In groups of two or three students, calculate either the liquidity, equity, profitability, or market test ratios. Each group should select a spokesperson to tell the rest of the class the results of the group's calculations. Finally, the class should decide whether or not to invest in the corporation based on the ratios they calculated.

Group Project 12–6
Analyze a company's performance against industry norms

In a group of two or three students, go to the library and attempt to locate Dun & Bradstreet's Industry Norms and Key Business Ratios. You may have to ask the reference librarian for assistance to see if this item is available at your institution. If it is not available at your institution, ask if it is available through an interlibrary loan. (Obviously, if you cannot obtain this item, you cannot do this project.) Then select and obtain the latest annual report of a company of your choice. Determine the company's SIC Code (a code that indicates the industry in which that company operates). SIC Codes for specific companies are available on COMPACT DISCLOSURE, an electronic source that may be available at your library. As an alternative, you could call the company's home office to inquire about its SIC Code. The annual report often contains the company's phone number. From the annual report, determine various ratios for the company, such as the current ratio, debt to equity ratio, and net income to net sales. Then compare these ratios to the industry norms for the company's SIC Code as given in the Dun & Bradstreet source. Write a report to your instructor summarizing the results of your investigation.

Group Project 12–7
Analyze the major sections of an annual report

In a group of two or three students, obtain the annual report of a company of your choice. Identify the major sections of the annual report and the order in which they appear. Would you recommend the order be changed to emphasize the most useful and important information? If so, how? Then describe some specific useful information in each section. Comment on your perceptions of the credibility that a reader of the annual report could reasonably assign to each section of the report. For instance, if such a discussion appears in the annual report you select, would you assign high credibility to everything that appears in the Letter to Stockholders regarding the company's future prospects? Write a report to your instructor summarizing the results of your investigation.

Using the Internet—A View of the Real World

Internet Project 12–8
Analyze an annual report retrieved on the Internet

Visit the following website for Eastman Kodak Company:

http://www.kodak.com

By following choices on the screen, locate the income statements and balance sheets for the latest two years. Calculate all of the ratios illustrated in the chapter for which the data are available. Compare the ratios to those shown for Synotech as presented in the chapter. Write a report to your instructor showing your calculations and comment on the results of your comparison of the two companies.

Internet Project 12–9
Analyze an annual report retrieved on the Internet

Visit the following website for General Electric Company:

http://www.ge.com

By following choices on the screen, locate the income statements and balance sheets for the latest two years. Calculate all of the ratios illustrated in the chapter for which the data are available. Compare the ratios to those shown for Synotech as presented in the chapter. Write a report to your instructor showing your calculations and comment on the results of your comparison of the two companies.

Answers to Self-Test

True-False

1. **True.** Financial statement analysis consists of applying analytical tools and techniques to financial statements and other relevant data to obtain useful information.
2. **False.** Horizontal analysis provides useful information about the changes in a company's performance over several periods by analyzing comparative financial statements of the same company for two or more successive periods.
3. **False.** Common-size statements show only percentage figures, such as percentages of total assets and percentages of net sales.
4. **True.** Liquidity ratios such as the current ratio and acid-test ratio indicate a company's short-term debt-paying ability.
5. **True.** The accrual net income shown on the income statement is not cash basis income and does not indicate cash flows.
6. **True.** Analysts must use comparable data when making comparisons of items for different periods or different companies.

Multiple-Choice

1. **b.** Current assets:
$136,000 + $64,000 + $184,000 + $244,000 + $12,000 = $640,000

Current liabilities:
$256,000 + $64,000 = $320,000

Current ratio:
$640,000/$320,000 = 2:1

2. **c.** Quick assets:
$136,000 + $64,000 + $184,000 = $384,000

Current liabilities:
256,000 + $64,000 = $320,000

Acid-test ratio:
$384,000/$320,000 = 1.2:1

3. **a.** Net sales:
$4,620,000

Average accounts receivable:
($720,000 + $960,000)/2 = $840,000

Accounts receivable turnover:
$4,620,000/$840,000 = 5.5

4. **c.** Cost of goods sold:
$3,360,000

Average inventory:
($900,000 + $1,020,000)/2 = $960,000

Inventory turnover:
$3,360,000/$960,000 = 3.5

5. **b.** Income before interest and taxes, $720,000
Interest on bonds, 192,000

Times interest earned ratio:
$720,000/$192,000 = 3.75 times

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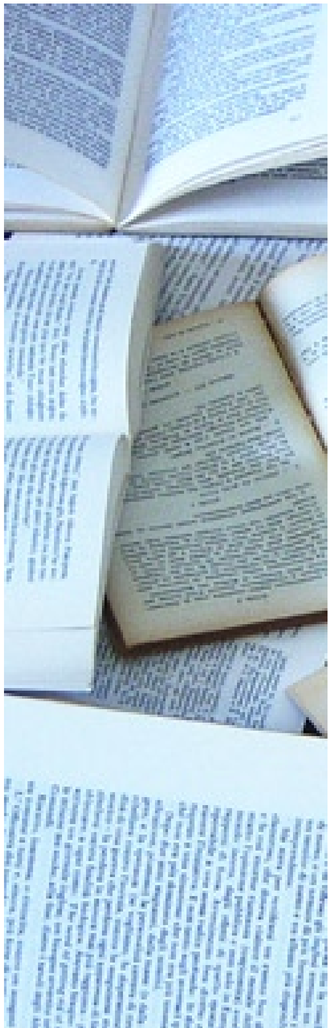

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- **Verifiable Circulation:** books are downloaded by students after they complete registration, so all downloads are verifiable!

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Check Figures

Chapter 1

P1-1 No check figure
P1-2 Gross margin %, Equipment Department, 40%
P1-3 No check figure
P1-4 Net income after taxes, $36,000
P1-1A No check figure
P1-2A Gross margin %, Supplies Department, 32.5%
P1-3A No check figure
P1-4A Net income after taxes, $48,000

Chapter 2

E2-1 No check figure
E2-2 No check figure
E2-3 Cost of goods manufactured, $500,000
E2-4 Total cost of completed job, $54,000
E2-5 Total cost of completed job, $65,200
E2-6 Paper Co., MOH rate, 50% of direct labor cost
E2-7 (a) Paper Co., $25,000 underapplied
E2-8 (4) Dr. Finished Goods Inventory, $14,600
E2-9 Variable costing, Income before income taxes, $640,800
P2-1 No check figure
P2-2 No check figure
P2-3 (a) Cost of goods manufactured, $162,500
P2-4 (b) Income from operations, $624,000
P2-5 (b) Income from operations, $3,800
P2-6 (b) Underapplied overhead, $0.6M
P2-7 (a) Net income, $94,320
P2-1A No check figure
P2-2A No check figure
P2-3A (a) Cost of goods manufactured, $898,000
P2-4A Overapplied overhead, $3,200
P2-5A (b) Overapplied overhead, $100
BDC2-1 No check figure
BDC2-2 (b) Income from operations, $13,600
WA2-3 No check figure
EC2-4 No check figure
GP2-5 No check figure

Chapter 3

E3-1 (a) Equivalent units, conversion, 64,320 units
E3-2 Equivalent units, conversion, 8,600 units
E3-3 Equivalent production, 96,000 units
E3-4 Cost of units completed and transferred out, $800,000
E3-5 Cost of units completed and transferred out, $61,740
P3-1 (c) Total cost per equivalent unit, $11.60
P3-2 Cost of ending inventory, $22,416
P3-3 (a) Cost of ending inventory, $100,000
P3-4 Cost of ending inventory, $21,420
P3-5 (a) Cost of ending inventory, $20,538
P3-6 (a) Grade A, allocated joint costs, $48,000
P3-1A (e) Cost of ending inventory, $58,860
P3-2A Cost of ending inventory, $15,600
P3-3A Cost of ending inventory, $41,700
BDC3-1 (b) Cost of ending inventory, $23,976
EC3-2 No check figure
ARA3-3 No check figure
CRP (c) Net loss, $55,000

Chapter 4

E4-1 Net increase in costs, $1,700
E4-2 No check figure
E4-3 (c) Cost of Goods Sold balance, $59,520
E4-4 (a) Touring bicycle, total unit cost, $1.79
E4-5 (a) Commercial, gross margin, $17,500
P4-1 (b) Net increase in costs, $12,400
P4-2 No check figure
P4-3 (c) Cost of Goods Sold balance, $850,500
P4-4 (a) Travel clocks, total overhead, $76,000
P4-5 (c) Nerds, total overhead, $11,100
P4-6 (a) Student, operating profit, $4,250
P4-1A (b) Net increase in costs, $18,400
P4-2A No check figure
P4-3A (c) Cost of Goods Sold balance, $675,000
P4-4A (a) Float trip, total cost, $6,720
P4-5A (c) Marathon, operating profit, $124,667
BDC4-1 No check figure
BDC4-2 No check figure
BDC4-3 No check figure

Chapter 5

E5-1 No check figure
E5-2 Fixed cost, $4,800
E5-3 Break-even point, $1,000,000
E5-4 Break-even point, 6,250 units
E5-5 Break-even point, $90,000
E5-6 (a) Break-even point, 10,000 units
E5-7 Net income with campaign, $7,700,000
E5-8 (b) Margin of safety, $640,000
E5-9 Break-even point, $500,000
P5-1 (a) Fixed cost, $9,200
P5-2 (c) Net income, $24,000
P5-3 (a) Break-even point, $750,000
P5-4 (a) Margin of safety, $350,000
P5-5 (a) Sales, $1,062,500
P5-6 Break-even point, $600,000
P5-7 (a) Break-even point, $300,000
P5-8 Break-even point, 96,000 units
P5-9 (b) Sierra Company, break-even point, 13,333 units
P5-10 (a) Break-even point, 7,000 units
P5-11 Net income if investment made, $216,000
P5-1A (a) Fixed cost, $30,600
P5-2A (c) Net profit, $64,000
P5-3A (a) Break-even point, $1,080,000
P5-4A (a) Break-even point, $210,000
P5-5A (b) Break-even point, 100,000 units
P5-6A Break-even point, $800,000
BDC5-1 (b) First alternative, income before taxes, $2,500,500
BDC5-2 (a) Break-even point, $1,200,000
BDC5-3 (a) Variable portion, $2.40 per unit
BDC5-4 No check figure

Chapter 6

E6-1 Contribution margin, $310,000
E6-2 Net disadvantage of mowing, $40
E6-3 Choice 2, total margin, $8,000
E6-4 Contribution margin for Z, $60,000
E6-5 Net benefit of retaining product, $20,000
E6-6 Net advantage of retaining department, $250,000
E6-7 Net advantage of further processing Product 1, $6
E6-8 No check figure
E6-9 Higher Quality Jam, net income, $800,000
P6-1 (a) Contribution margin, $44,000
P6-2 (a) Contribution margin at $8 price, $240,000
P6-3 (a) Contribution margin of special order, $5,000
P6-4 Net disadvantage of dropping product C, $70,000
P6-5 Net advantage of further processing Grade A, $0.30
P6-6 Net advantage in favor of making, $5
P6-7 Higher quality components, net income, $6,000,000

P6-1A (a) Contribution margin, $318,000
P6-2A (a) Contribution margin at $8 price, $57,600
P6-3A Net advantage of retaining product B, $50,000
P6-4A Net advantage in favor of making, $20
P6-5A Higher quality ingredients, net income, $440,000
BDC6-1 Lost income before income taxes, $190,000
BDC6-2 (a) Break-even point, 2,769 hours
BDC6-3 No check figure

Chapter 7

E7-1 Finished goods inventory, 3/31/07, 33,600 units
E7-2 Budgeted income before income taxes, $30,000
E7-3 Budgeted net income, $691,200
E7-4 Materials cost at 52,500 units, $207,900
E7-5 Materials, budget variance, $9,400 over budget
E7-6 No check figure
E7-7 Purchases required, $45,000
P7-1 (b) June net income, $1,648,800
P7-2 (b) Net operating income, $52,600 under budget
P7-3 (b) Net income, $54,000 over budget
P7-4 Total selling and administrative expenses at sales volume of $48 million, $17,908,800
P7-5 Total cash receipts for September, $370,000
P7-6 Planned cash balance at end of September, $123,800
P7-1A (b) Cost of goods sold for April, $2,758,400
P7-2A (b) Net operating income, $364,286 under budget
P7-3A (a) Net income, $6,354,000
P7-4A Planned cash balance at end of quarter, $15,200
BDC7-1 (a) Planned cash disbursements, $793,750
EC7-2 No check figure
BP7-3 No check figure
CP7-1 (a) Net income, $129,600
CP7-2 (a) Net income, $244,800

Chapter8

E8-1 Materials price variance, $3,280 Fav.
E8-2 Materials usage variance, $60,500 Unfav.
E8-3 Labor rate variance, $61,920 Fav.
E8-4 Labor efficiency variance, $48,000 Fav.
E8-5 Overhead budget variance, $6,000 Fav.
E8-6 Overhead volume variance, $4,800 Unfav.
E8-7 Dr. to Cost of Goods Sold, $80,800
P8-1 Materials price variance, $720 Unfav.
P8-2 (b) Dr. Materials usage variance, $24
P8-3 Labor rate variance, $104,000 Fav.
P8-4 (a) Dr. Labor efficiency variance, $47,250
P8-5 (a) Overhead budget variance, $3,840 Unfav.
P8-6 Overhead budget variance, $4,000 Unfav.
P8-1A (a) Materials price variance, $4,800 Fav.
P8-2A Materials price variance, $20,000 Fav.
P8-3A Dr. Labor rate variance, $2,000
P8-4A (a) Overhead volume variance, $11,250 Unfav.
BDC8-1 No check figure
BDC8-2 No check figure
BP8-3 No check figure

Chapter 9

E9-1 Supplies, $10,800 under budget
E9-2 Contribution to indirect expenses, $690,000
E9-3 Contribution to indirect expenses, $276,000
E9-4 (a) Segment A, allocation of administrative overhead, $15,000
E9-5 (a) Return on investment for Mountain Bike, $33\frac{1}{3}$%
E9-6 (a) Return on investment, $34\frac{2}{3}$%
E9-7 (a) Return on investment, 20%
E9-8 Segment Air, residual income $8,640
P9-1 Plant Manager, office expense, $2,400 over budget
P9-2 (b) Sacramento Plant, return on investment, 5%
P9-3 (a) Segment A, home office building expense, $61,440
P9-4 (a) Segment X, contribution to indirect expenses, $31,440
P9-5 (a) LA segment, contribution to indirect expenses, $60,000
P9-6 (a) Louisiana Segment, return on investment, 18%
P9-7 (a) Return on investment, 8%
P9-8 (a) Fore Company, return on investment, 25.0%
P9-9 Woods Project, residual income, $75,000
P9-1A (b) Plant X, return on investment, 29.2%
P9-2A (a) High Risk Segment, revolving charge service revenue, $200,000
P9-3A (a) Interior segment, contribution to indirect expenses, $106,500
P9-4A (a) Segment A, contribution to indirect expenses, $5,040
P9-5A (a) Segment 1, return on investment, 12%
BDC9-1 No check figure
BDC9-2 No check figure
BDC9-3 Budget items controlled by Clark, $48,750
BP9-4 No check figure

Chapter 10

E10-1 Net cash inflow after taxes, $72,000
E10-2 Net cash inflow after taxes, $4,800
E10-3 Payback period, 12.4 years
E10-4 Unadjusted rate of return, 5.9%
E10-5 Proposal 1, profitability index, 1.13
E10-6 Proposal A, payback period, 3 years
E10-7 Net present value, ($9,553)
E10-8 Time-adjusted rate of return, slightly more than 12%
E10-9 (b) Proposal A, net present value, ($50,417)
P10-1 (a) Net cash flow after taxes, $48,000
P10-2 Additional cash flow, $9,600
P10-3 (a) New machine, total out-of-pocket costs, $1,674,240
P10-4 (c) Payback period, 5.16 years
P10-5 (c) Proposal 1, profitability index, 1.13
P10-6 a) Lease, present value of out-of-pocket costs, $13,026
P10-7 Net present value, ($607,856)
P10-8 Net present value, ($1,062,573)
P10-9 Net present value of selling equipment, $4,883
P10-1A (a) Net cash inflow after taxes, $2,700
P10-2A (a) New vans, total out-of-pocket costs, $1,752,000
P10-3A (a) Time-adjusted rate of return, slightly more than 15%
P10-4A Net present value of purchase, $462,826
BDC10-1 (a) Net present value of Investment A, $4,488.60
BDC10-2 (a) Net present value, ($42,304.05)
AP10-3 No check figure
EC10-4 No check figure

Chapter 11

E11-1 No check figure
E11-2 Cost of goods sold, cash basis, $288,000
E11-3 No check figure
E11-4 Net cash provided by operating activities, $193,000
E11-5 Net cash provided by operating activities, $448,000
E11-6 No check figure
E11-7 Purchase of plant assets, $20,000

E11-8 Net cash provided by operating activities, $47,000
E11-9 No check figure
P11-1 (b) Net cash provided by operating activities, $428,000
P11-2 Net cash provided by operating activities, $39,555
P11-3 No check figure
P11-4 (g) Cash flow per share of common stock ratio, $1.40
P11-5 (b) Net cash provided by operating activities, $217,700
P11-1A (b) Net cash provided by operating activities, $256,000
P11-2A Net cash provided by operating activities, $71,250
P11-3A (i) Cash flow liquidity ratio, 17.37 times
P11-4A No check figure
P11-5A (b) Net cash provided by operating activities, $66,750
BDC11-1 Net cash provided by operating activities, $(7,500)
BDC11-2 Net cash provided by operating activities, $149,500
ARA11-3 No check figure
ARA11-4 No check figure
ARA11-5 No check figure

Chapter 12

E12-1 Net income increase, 18.1%
E12-2 (a) (3) Current ratio, 1.75:1
E12-3 (a) 91.25 days
E12-4 Cash flow margin, 1.39%
E12-5 Inventory turnover, 5.2 times
E12-6 Rate of return on operating assets, 19.2%
E12-7 Return on average common stockholders' equity, 24%
E12-8 EPS, $8 per share
E12-9 Weighted-average no. of shares, 852,000
E12-10 EPS for 2006, $1
E12-11 No. of times interest earned, 7.25 times
E12-12 (a) Times preferred dividend earned, 6 times
E12-13 P-E ratio, 72
P12-1 (a) Net earnings decrease, 456.6%
P12-2 No check figure
P12-3 (b) Current ratio, 2008, 2.88:1
P12-4 No check figure
P12-5 (a) Rate of return on operating assets, 25%
P12-6 No check figure
P12-7 No check figure
P12-8 (a) Rate of return on operating assets, 12%
P12-1A (a) Net sales increase, 1.0%
P12-2A No check figure
P12-3A (c) Acid-test ratio, 2008, 1.52:1
P12-4A No check figure
P12-5A (a) Co. 1, Rate of return on operating assets, 13.38%
P12-6A No check figure
P12-7A No check figure
P12-8A (a) Inventory turnover, 1.56 times
BDC12-1 (a) Net income, $316,800
BDC12-2 (a) No. of days' sales in accounts receivable, 2005, 52.14 days
BDC12-3 (a) (2) Apple, Inc., EPS using first advisor's estimate, $0.38
ARA12-4 No check figure

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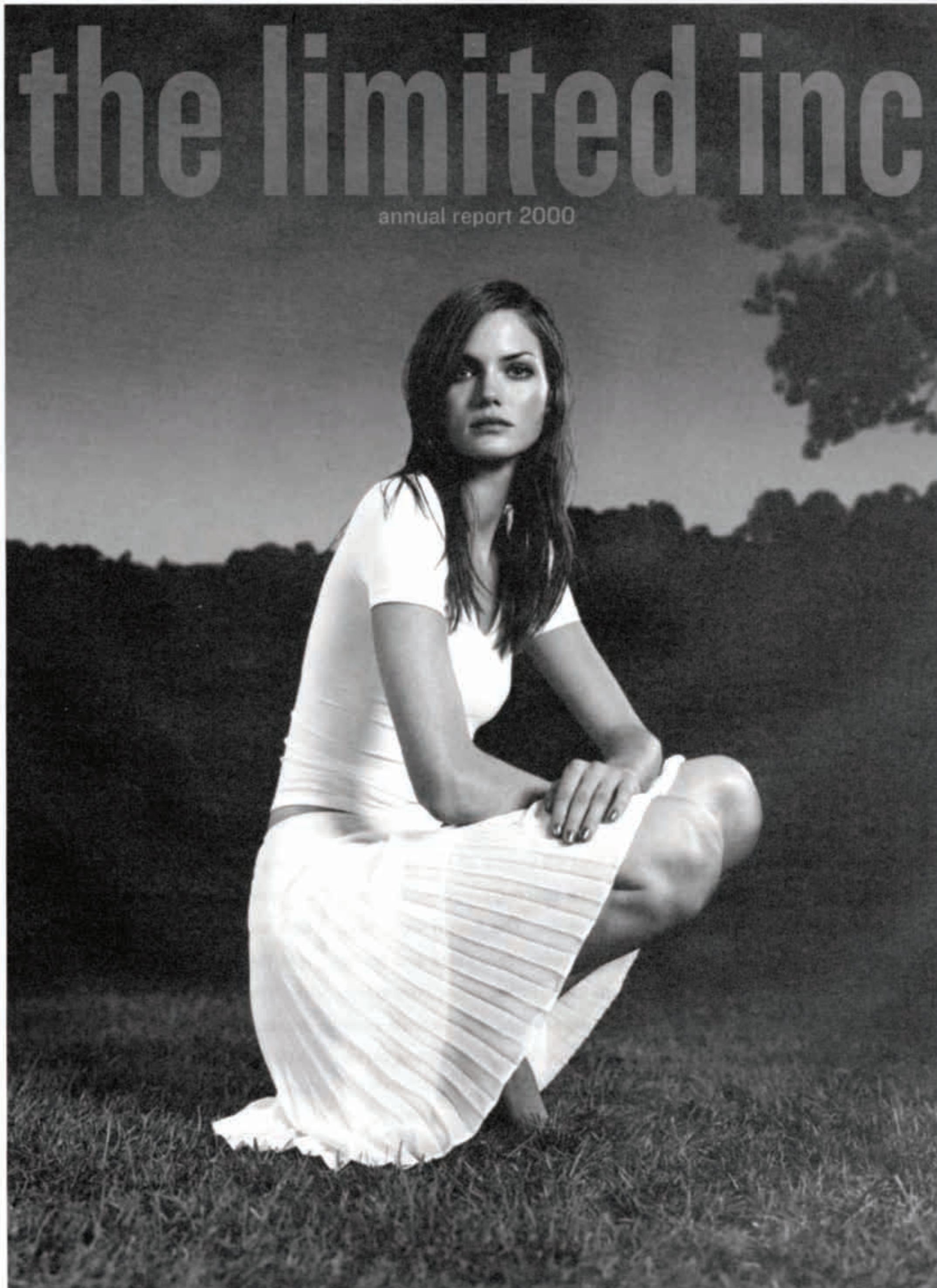
Annual Report Appendix
The Limited, Inc.



Dear Partner:

In the past 12 months we have made substantial progress toward our stated goal of sustained growth of shareholder value through a portfolio of powerful fashion brands.

We made progress in our ongoing commitment to talent. Progress in defining and evolving our brands. Progress across disciplines, and individual functions. Major progress at Express, Bath & Body Works and the Victoria's Secret megabrand.

For the first 43 weeks of the year, you could clearly feel the progress, and see it in the results. The brand work was paying off. Same store sales and profit were up. Inventories were controlled. Top stores were winning. Brands were more tightly defined. Everything we've been talking about.

Then came Christmas.

The NASDAQ crashed. Consumer confidence fell. And customers, who would normally be shopping the malls, were consumed with chads, butterflies and who would be their next president. It was the worst Christmas environment in memory, and it took its toll, not only on us, but virtually every significant retailer from Wal-Mart to Neiman Marcus to Home Depot.

It dramatically affected our overall results, and I was very dissatisfied with our final numbers.

So, on the basis of all that, what are we planning to do?

Actually, we're going to stick with our strategy.

Creating brands. Building value. Best talent. Best processes. Fewer, more dominant brands that understand their "best-at" and deliver it with consistency. Brands that, simply, know how to win. We'll concentrate on top stores, disciplined inventories and tightly controlled expenses. We'll stay the course.

Why? Because it's working. And it will continue to work.

Are brands still as important? No, they're more so. Whether it's Ralph Lauren or Express, Tiffany or Victoria's Secret, customers prefer brands. Period.

So we will continue to build a portfolio of powerful, cut-through brands. Brands that not only win, but lead their respective categories. And we will distort all of our efforts against those brands. Because they have the ability to achieve greater results faster, and with consistency. Which is why, recently, we announced two significant decisions: first, our plan to sell Lane Bryant. And second, to integrate the Structure men's business into Express, creating a dual-gender brand, under the leadership of Express CEO Michael Weiss.

To anyone who follows our business, what's going on here is very clear. And completely consistent with our stated objectives. Lane Bryant is an excellent retailer, providing the plus-size customer with fashion choices. But, not a fit to our strategic platform. Express, on the other hand, made superb brand progress in the past two years. They understand their customer very well and offer forward fashion to them on a continuing basis. Structure, or I should now say Express Men's, can benefit from Express's merchandising vision, their speed to market, the focus they put on the customer and their brand and business disciplines. Is there a "there there" in the men's business? Absolutely. It's white space that is not being served by anyone. And the momentum created by this dual-gender brand should be very exciting and compelling, with the potential for billions of dollars in sales.

In short, a win-win . . . and we are working to make it happen.

Even as we've made that decision, I want you to know that I've instructed our brands to plan very conservatively for the next nine months. I've instructed the CEOs, the merchants and the marketers to nail the fundamentals and stay on them. Clear, consistent fashion and visuals that maintain and enhance their individual brand images. No freelancing. No divergence. Good business practices. Well-executed.

I also believe, by the way, that good businesspeople should be good citizens. Two interesting facts: we were recently ranked second among specialty retailers in terms of overall reputational quality in the Fortune magazine annual survey. That means our message and our strategy are penetrating the broader community in a meaningful way. At the same time, we were recognized with the Horace Mann Award for our contributions to public education, through the ColumbusReads program, a small part of a very large, broad-based philanthropic effort that thousands of our associates participate in.

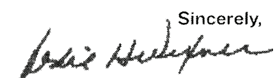
Good business, good citizenship. The right thing to do.

We go into 2001 healthier than we've been in some time. And I'm optimistic that our fashion is more correct, more forward, with inventories well-controlled. And they will stay well-controlled. I'm demanding that we carefully manage expenses and make cuts where appropriate in any and all parts of the business.

Which leads me to the format for this annual report. Normally, you'd see a glossier, slicker, more expensive book. But I really couldn't justify the expense. Why spend that kind of money on information that, on the day it's produced, is at least three months old and gets older from there? You can access up-to-the-minute financial information from our Web site (www.Limited.com) on a daily basis. The traditional annual report is probably obsolete. It was time to move to next.

The very definition of a fashion brand.

Sincerely,



Leslie H. Wexner

Chairman and Chief Executive Officer

express

From every angle, Express is a fashion leader. International, innovative, sexy, strong. A modern brand that delivers runway style, virtually as it heads down the runway. Great design. Well priced. That's Express.

EXPRESS	2000	1999	1998
Sales (millions)	$1,594	$1,367	$1,322
Comparable Store Sales	15%	5%	16%
Sales per Average Selling Square Foot	$366	$306	$286
Number of Stores	667	688	702

lerner new york

Lerner New York is redefining competitively priced fashion with its New York & Company brand. Modern, city hip, energetic, New York & Company is fashion with an attitude.

LERNER NEW YORK	2000	1999	1998
Sales (millions)	$1,025	$1,001	$929
Comparable Store Sales	4%	12%	5%
Sales per Average Selling Square Foot	$234	$209	$174
Number of Stores	560	594	643

lane bryant

Hot fashion, star power, sizzling brands. Lane Bryant's sportswear line, Venezia Jeans Clothing Co., and sexy new intimates line, Cacique, set the standard in hip fashion for women size 14+.

LANE BRYANT	2000	1999	1998
Sales (millions)	$930	$922	$922
Comparable Store Sales	2%	5%	5%
Sales per Average Selling Square Foot	$286	$269	$254
Number of Stores	653	688	730

the limited

The Limited brand designs sophisticated sportswear for the Modern American Woman, who wants accessible feminine fashion at a great value.

THE LIMITED	2000	1999	1998
Sales (millions)	$673	$704	$746
Comparable Store Sales	5%	5%	1%
Sales per Average Selling Square Foot	$259	$230	$208
Number of Stores	389	443	551

structure

On February 28, 2001, The Limited, Inc. announced the integration of Structure into Express as Express Men's. Structure will be reunited with its original brand—it was founded in 1987 as a division of Express.

STRUCTURE	2000	1999	1998
Sales (millions)	$569	$607	$599
Comparable Store Sales	(4%)	4%	(8%)
Sales per Average Selling Square Foot	$295	$296	$281
Number of Stores	469	499	532

intimate brands

The Limited, Inc. owns approximately 84% of Intimate Brands, Inc. (NYSE: IBI). IBI is the leading specialty retailer of intimate apparel, personal care and beauty products, sold through the Victoria's Secret, Bath & Body Works and White Barn Candle Company brands.

INTIMATE BRANDS	2000	1999	1998
Sales (millions)	$5,117	$4,632	$3,989
Comparable Store Sales	4%	12%	5%
Sales per Average Selling Square Foot	$601	$596	$552
Number of Stores	2,390	2,110	1,890

OPERATING RESULTS

	2000	1999	1998
Comparable store sales increase			
Apparel businesses	6%	6%	5%
Intimate Brands	4%	12%	5%
Total Limited, Inc.	5%	9%	6%
Net sales (millions)			
Apparel businesses	$4,949	$4,709	$4,589
Intimate Brands	5,117	4,632	3,989
Other	39	425	787
Total Limited, Inc.	$10,105	$9,766	$9,365
Adjusted operating income (millions) ●			
Apparel businesses	$123	$132	$(45)
Intimate Brands	754	794	671
Other	(1)	(26)	17
Total Limited, Inc.	$876	$900	$643
Adjusted net income per share ●	$0.97	$0.97	$0.68
Number of stores			
Apparel businesses	2,738	2,912	3,158
Intimate Brands	2,390	2,110	1,890
Other	1	1	334
Total Limited, Inc.	5,129	5,023	5,382
Selling square feet (thousands)			
Apparel businesses	15,943	17,091	18,517
Intimate Brands	7,246	6,466	5,794
Other	35	35	2,005
Total Limited, Inc.	23,224	23,592	26,316
Sales per average selling square foot			
Apparel businesses	$290	$258	$234
Intimate Brands	$601	$596	$552

YEAR-END POSITION

(Millionsexcept financial ratios)

	2000	1999	% Change
Total assets	$4,088	$4,126	(1%)
Working capital	$1,068	$1,049	2%
Current ratio	2.1	1.8	
Long-term debt	$400	$400	–
Debt-to-equity ratio	17%	19%	
Shareholders' equity	$2,316	$2,147	8%
Adjusted return on average shareholders' equity ●	19%	21%	
Adjusted return on average assets ●	11%	10%	

QUARTERLY RESULTS

(Millions)

	Apparel Businesses			Intimate Brands			Total Limited, Inc.		
	2000	1999	% Change	2000	1999	% Change	2000	1999	% Change
Sales									
First Quarter	$1,071	$1,046	2%	$1,044	$908	15%	$2,125	$2,117	–
Second Quarter	1,090	1,063	3%	1,191	1,054	13%	2,289	2,289	–
Third Quarter	1,214	1,152	5%	944	832	13%	2,169	2,064	5%
Fourth Quarter	1,574	1,448	9%	1,938	1,838	5%	3,522	3,296	7%
Total Year	$4,949	$4,709	5%	$5,117	$4,632	10%	$10,105	$9,766	3%
Adjusted operating income ●									
First Quarter	$12	$1	nm	$116	$95	22%	$127	$89	43%
Second Quarter	(13)	(11)	(18%)	171	156	10%	157	139	13%
Third Quarter	23	23	–	80	72	11%	105	90	17%
Fourth Quarter	101	119	(15%)	387	471	(18%)	487	582	(16%)
Total Year	$123	$132	(7%)	$754	$794	(5%)	$876	$900	(3%)

● Adjusted amounts exclude special items and reflect the Limited Too spin-off and Abercrombie & Fitch split-off as if they had occurred on February 1, 1998. See the "Other Data" section on pages 8 and 9 for a discussion of these items.

nm not meaningful

6 **FINANCIAL SUMMARY**

(Millions except per share amounts, ratios and store and associate data)

Summary of Operations	★ 2000	● 1999	● 1998	1997	1996	●♦★ 1995	1994	● 1993	1992	♦ 1991	1990
Net sales	$10,105	$9,766	$9,365	$9,200	$8,652	$7,893	$7,321	$7,245	$6,944	$6,149	$5,254
Gross income	$3,437	$3,323	$2,940	$2,736	$2,424	$2,033	$2,108	$1,959	$1,991	$1,794	$1,630
Operating income	✚ $866	✚ $931	✚ $2,424	✚ $469	✚ $636	✚ $612	$796	✚ $702	$789	$713	$698
Operating income as a percentage of sales	✚ 8.6%	✚ 9.5%	✚ 25.9%	✚ 5.1%	✚ 7.4%	✚ 7.8%	10.9%	✚ 9.7%	11.4%	11.6%	13.3%
Net income	■ $428	■ $461	■ $2,046	■ $212	■ $434	■ $961	$447	■ $391	■ $455	$403	$398
Net income as a percentage of sales	■ 4.2%	■ 4.7%	■ 21.9%	■ 2.3%	■ 5.0%	■ 12.2%	6.1%	■ 5.4%	■ 6.6%	6.6%	7.6%
Per Share Results											
Basic net income	■ $1.00	■ $1.05	■ $4.25	■ $0.39	■ $0.78	■ $1.35	$0.63	■ $0.55	■ $0.63	$0.56	$0.56
Diluted net income	■ $0.96	■ $1.00	■ $4.15	■ $0.39	■ $0.77	■ $1.34	$0.63	■ $0.54	■ $0.63	$0.56	$0.55
Dividends	$0.30	$0.30	$0.26	$0.24	$0.20	$0.20	$0.18	$0.18	$0.14	$0.14	$0.12
Book value	$5.44	$5.00	$4.78	$3.64	$3.45	$4.43	$3.78	$3.41	$3.13	$2.60	$2.17
Weighted average diluted shares outstanding	443	456	493	549	564	717	717	726	727	727	724
Other Financial Information											
Total assets	$4,088	$4,126	$4,550	$4,301	$4,120	$5,267	$4,570	$4,135	$3,846	$3,419	$2,872
Return on average assets	■ 10%	■ 11%	■ 46%	■ 5%	■ 9%	■ 20%	10%	■ 10%	■ 13%	13%	15%
Working capital	$1,068	$1,049	$1,127	$1,001	$712	$1,962	$1,694	$1,513	$1,063	$1,084	$884
Current ratio	2.1	1.8	2.0	2.0	1.9	3.3	3.0	3.1	2.5	3.1	2.8
Capital expenditures	$446	$375	$347	$363	$361	$374	$320	$296	$430	$523	$429
Long-term debt	$400	$400	$550	$650	$650	$650	$650	$650	$542	$714	$540
Debt-to-equity ratio	17%	19%	25%	33%	35%	21%	24%	27%	24%	38%	35%
Shareholders' equity	$2,316	$2,147	$2,167	$1,986	$1,869	$3,148	$2,705	$2,441	$2,268	$1,877	$1,560
Return on average shareholders' equity	■ 19%	■ 21%	■ 99%	■ 11%	■ 17%	■ 33%	17%	■ 17%	■ 22%	23%	28%
Comparable store sales increase (decrease)	5%	9%	6%	0%	3%	(2%)	(3%)	(1%)	2%	3%	3%
Stores and Associates at End of Year											
Total number of stores open	5,129	5,023	5,382	5,640	5,633	5,298	4,867	4,623	4,425	4,194	3,760
Selling square feet	23,224	23,592	26,316	28,400	28,405	27,403	25,627	24,426	22,863	20,355	17,008
Number of associates	123,700	114,600	126,800	131,000	123,100	106,900	105,600	97,500	100,700	83,800	72,500

★ Fifty-three-week fiscal year.

● Includes the results of the following companies disposed of up to their separation date: 1) Galyan's Trading Co. ("Galyan's") effective August 31, 1999; 2)Limited Too ("TOO") effective August 23, 1999; 3) Abercrombie & Fitch ("A&F") effective May 19, 1998; 4) Alliance Data Systems effective January 31, 1996; and 5) Brylane, Inc. effective August 31, 1993.

♦ Includes the results of Galyan's and Gryphon subsequent to their acquisitions on July 2, 1995 and June 1, 1991.

✚ Operating income includes the net effect of special and nonrecurring items of ($9.9) million in 2000, $23.5 million in 1999 and $1.740 billion in 1998 (see Note 2 to the Consolidated Financial Statements), ($213.2) million in 1997, ($12.0) million in 1996, $1.3 million in 1995 and $2.6 million in 1993. Inventory liquidation charges of ($13.0) million related to Henri Bendel store closings are also included in 1997.

■ In addition to the items discussed in ✚ above, net income includes the effect of the following gains: 1) $11.0 million related to Galyan's in 1999; 2) $8.6 million related to Brylane, Inc. in 1997; 3) $118.2 million related to A&F in 1996; 4) $649.5 million related to Intimate Brands, Inc. in 1995; and 5) $9.1 million related to United Retail Group in 1992.

Note: Amounts for fiscal years 1995–1999 reflect the reclassification of catalog shipping and handling revenues and costs and associate discounts (see Note 1 to the Consolidated Financial Statements).

MANAGEMENT'S DISCUSSION AND ANALYSIS

Results of Operations

Net sales for the fourteen-week fourth quarter of 2000 were $3.522 billion, a 7% increase from $3.296 billion for the thirteen-week fourth quarter of 1999. Comparable store sales increased 2% for the quarter. Gross income decreased 1% to $1.277 billion in the fourth quarter of 2000 from $1.291 billion in 1999 and operating income decreased 23% to $477.5 million from $619.1 million in 1999. Net income was $238.1 million in the fourth quarter of 2000 versus $316.5 million in 1999, and earnings per share were $0.54 versus $0.70 in 1999.

Net sales for the fifty-three-week year ended February 3, 2001 were $10.105 billion, a 3% increase from $9.766 billion for the fifty-two-week year ended January 29, 2000. Gross income increased 3% to $3.437 billion in 2000 from $3.323 billion in 1999 and operating income was $866.1 million in 2000 versus $930.8 million in 1999. Net income for 2000 was $427.9 million, or $0.96 per share, compared to $460.8 million, or $1.00 per share, last year.

There were a number of items in 2000 and 1999 that impacted the comparability of the Company's reported financial results. See the "Special and Nonrecurring Items" and "Other Data" sections herein for a discussion of these items.

The following summarized financial data compares reported 2000 results to the comparable periods for 1999 and 1998 (millions):

Net Sales	● 2000	1999	1998	% Change 2000–1999	% Change 1999–1998
Express	$1,594	$1,367	$1,322	17%	3%
Lerner New York	1,025	1,001	929	2%	8%
Lane Bryant	930	922	922	1%	–
Limited Stores	673	704	746	(4%)	(6%)
Structure	569	607	599	(6%)	1%
Other (principally Mast)	158	108	71	46%	52%
Total apparel businesses	$4,949	$4,709	$4,589	5%	3%
Victoria's Secret Stores	2,339	2,122	1,816	10%	17%
Bath & Body Works	1,785	1,530	1,254	17%	22%
Victoria's Secret Direct	962	956	894	1%	7%
Other	31	24	25	29%	(4%)
Total Intimate Brands	$5,117	$4,632	$3,989	10%	16%
Henri Bendel	39	38	39	3%	(3%)
Galyan's (through August 31,1999)	–	165	220	nm	nm
TOO (through August 23, 1999)	–	222	375	nm	nm
A&F (through May 19, 1998)	–	–	153	nm	nm
Total net sales	$10,105	$9,766	$9,365	3%	4%
Operating Income					
Apparel businesses	$123	$132	$(45)	(7%)	393%
Intimate Brands	754	794	671	(5%)	18%
Other	(1)	(19)	58	nm	nm
Subtotal	876	907	684	(3%)	33%
Special and nonrecurring items ★	(10)	24	1,740		
Total operating income	$866	$931	$2,424		

● Fifty-three-week fiscal year.

★ Special and nonrecurring items —

2000: a $9.9 million charge for Intimate Brands to close Bath & Body Works' nine stores in the United Kingdom.

1999: 1) a $13.1 million charge for transaction costs related to the TOO spin-off; and 2) the reversal of a $36.6 million liability related to downsizing costs for Henri Bendel. These special items relate to the "Other" category.

1998: 1) a $1.651 billion tax-free gain on the split-off of A&F; 2) a $93.7 million gain from the sale of the Company's remaining interest in Brylane; and 3) a $5.1 million charge for severance and other associate termination costs related to the closing of Henri Bendel stores. These special items relate to the "Other" category.

nm not meaningful

The following summarized financial data compares reported 2000 results to the comparable periods for 1999 and 1998:

Comparable Store Sales	2000	1999	1998
Express	15%	5%	16%
Lerner New York	4%	12%	5%
Lane Bryant	2%	5%	5%
Limited Stores	5%	5%	1%
Structure	(4%)	4%	(8%)
Total apparel businesses	6%	6%	5%
Victoria's Secret Stores	5%	12%	4%
Bath & Body Works	1%	11%	7%
Total Intimate Brands	4%	12%	5%
Henri Bendel	(1%)	7%	(12%)
Galyan's (through August 31, 1999)	–	9%	5%
TOO (through August 23, 1999)	–	9%	15%
A&F (through May 19, 1998)	–	–	48%
Total comparable store sales	5%	9%	6%

Store Data	2000	1999	1998	% Change 2000-1999	% Change 1999-1998
Retail sales increase (decrease) due to net new (closed) and remodeled stores					
Apparel businesses	(4%)	(4%)	(3%)		
Intimate Brands	7%	7%	7%		
Retail sales per average selling square foot					
Apparel businesses	$290	$258	$234	12%	10%
Intimate Brands	$601	$596	$552	1%	8%
Retail sales per average store (thousands)					
Apparel businesses	$1,696	$1,516	$1,368	12%	11%
Intimate Brands	$1,833	$1,826	$1,705	–	7%
Average store size at end of year (selling square feet)					
Apparel businesses	5,823	5,869	5,864	(1%)	–
Intimate Brands	3,032	3,064	3,066	(1%)	–
Selling square feet at end of year (thousands)					
Apparel businesses	15,943	17,091	18,517	(7%)	(8%)
Intimate Brands	7,246	6,466	5,794	12%	12%

	Apparel and Other Businesses			Intimate Brands		
Number of Stores	2000	1999	1998	2000	1999	1998
Beginning of year	2,913	3,492	3,930	2,110	1,890	1,710
Opened	25	54	50	305	241	201
Closed	(199)	(280)	(329)	(25)	(21)	(21)
Businesses disposed of						
Galyan's	–	(18)	–	–	–	–
TOO	–	(335)	–	–	–	–
A&F	–	–	(159)	–	–	–
End of year	2,739	2,913	3,492	2,390	2,110	1,890

Net Sales

Fourth Quarter

Net sales for the fourteen-week fourth quarter of 2000 increased 7% to $3.522 billion from $3.296 billion for the thirteen-week fourth quarter of 1999. The increase was due to the net addition of 106 stores in fiscal year 2000, the inclusion of sales for the fourteenth week and a comparable store sales increase of 2%.

At Intimate Brands ("IBI"), net sales for the fourth quarter of 2000 increased 5% to $1.938 billion from $1.838 billion in 1999. The increase was due to the net addition of 280 new stores in fiscal year 2000 and the inclusion of sales for the fourteenth week. These factors were partially offset by a 3% decrease in comparable store sales and a 9% decrease in sales at Victoria's Secret Direct. These declines were the result of a difficult holiday season and a promotional retail environment. At the apparel retail businesses, net sales for the fourth quarter of 2000 increased 8% to $1.524 billion from $1.407 billion in 1999. The increase was due to a 7% increase in comparable store sales and the inclusion of sales for the fourteenth week, partially offset by the net closure of 174 stores in fiscal year 2000.

Net sales of $3.296 billion for the fourth quarter of 1999 increased 1% over 1998. A comparable store sales increase of 5% was partially offset by the loss of sales from Galyan's Trading Co. ("Galyan's") following the third party purchase of a 60% majority interest effective August 31, 1999, and from the loss of Limited Too ("TOO") sales after its August 23, 1999 spin-off.

At IBI, net sales for the fourth quarter of 1999 increased 18% to $1.838 billion from $1.558 billion in 1998. The increase was due to an 11% increase in comparable store sales, the net addition of 220 new stores in fiscal year 1999 and a 14% increase in sales at Victoria's Secret Direct. At the apparel retail businesses, net sales for the fourth quarter of 1999 decreased 3% to $1.407 billion from $1.454 billion in 1998. The decrease was due to the net closure of 246 stores in fiscal year 1999, partially offset by a 1% increase in comparable store sales.

Full Year

Net sales for the fifty-three-week fiscal year 2000 were $10.105 billion compared to $9.766 billion for the fifty-two-week fiscal year 1999. Sales increased due to a 5% comparable store sales increase, the net addition of 106 new stores and, to a small extent, the inclusion of sales for the fifty-third week. These gains were partially offset by the loss of sales from Galyan's and TOO.

In 2000, IBI sales increased 10% to $5.117 billion from $4.632 billion in 1999. The increase was primarily due to the net addition of 280 new stores and a 4% increase in comparable store sales. Bath & Body Works led IBI with sales increasing 17% to $1.785 billion from $1.530 billion in 1999, primarily due to the net addition of 218 new stores (549,000 selling square feet). Victoria's Secret Stores' sales increased 10% to $2.339 billion from $2.122 billion in 1999. The sales increase was primarily due to a 5% increase in comparable store sales and the net addition of 62 new stores (231,000 selling square feet). Sales at Victoria's Secret Direct increased 1% to $962.4 million from $956.0 million in 1999.

The apparel businesses reported a retail sales increase of 4% to $4.791 billion from $4.601 billion in 1999. The sales increase was primarily due to a 6% comparable store sales increase, partially offset by the net closure of 174 stores (1.1 million selling square feet).

Net sales for the year were $9.766 billion in 1999 compared to $9.365 billion in 1998. The increase was due to a 9% comparable store sales increase that was partially offset by the net closure of stores in the apparel segment and the loss of sales from Galyan's, TOO and Abercrombie & Fitch ("A&F") subsequent to its May 19, 1998 split-off.

In 1999, IBI sales increased 16% to $4.632 billion from $3.989 billion in 1998, due to a 12% increase in comparable store sales, the net addition of 220 new stores and a 7% increase in sales at Victoria's Secret Direct. Bath & Body Works led IBI with a 22% sales increase to $1.530 billion. The sales increase was primarily due to the net addition of 153 new stores (398,000 selling square feet), as well as an 11% increase in comparable store sales. Victoria's Secret Stores' sales increased 17% to $2.122 billion. The sales increase was primarily due to a 12% increase in comparable store sales and the net addition of 67 new stores (274,000 selling square feet). Sales at Victoria's Secret Direct increased 7% to $956.0 million in 1999. The sales increase was due to an increased response rate, higher sales per catalog page and increased e-commerce sales through www.VictoriasSecret.com.

In 1999, the apparel businesses reported a retail sales increase of 2% to $4.601 billion from $4.517 billion in 1998. The sales increase was primarily due to a 6% comparable store sales increase. All apparel businesses reported comparable store sales increases, led by Lerner New York, which reported an increase of 12%. The effect of these increases on total sales was partially offset by the net closure of 246 apparel stores (1.4 million selling square feet).

Gross Income

Fourth Quarter

For the fourth quarter of 2000, the gross income rate (expressed as a percentage of sales) decreased to 36.3% from 39.2% for the same period in 1999. The rate decrease was primarily due to a decrease in the merchandise margin rate as a result of higher markdowns to clear slower selling inventory assortments during and after a highly promotional holiday season. Additionally, a slight increase in the buying and occupancy expense rate resulted from an increase at IBI that was partially offset by the positive impact of closing underperforming stores at the apparel businesses.

For the fourth quarter of 1999, the gross income rate increased to 39.2% from 35.3% for the same period in 1998. The rate increase was principally due to an increase in the merchandise margin rate and a slight decrease in the buying and occupancy expense rate. The increase in the merchandise margin rate was primarily due to improved inventory management and merchandising strategies. The buying and occupancy expense rate decrease was a result of sales leverage at IBI and the positive impact of closing underperforming stores at the apparel businesses.

Full Year

In 2000, the gross income rate was 34.0%, unchanged from 1999, as a decrease in the merchandise margin rate was offset by an improvement in the buying and occupancy expense rate. The decrease in the merchandise margin rate was primarily due to higher markdowns, principally in the fourth quarter. The overall buying and occupancy expense rate improvement was a result of the benefit from store closings at the apparel businesses, which more than offset a slight increase in the buying and occupancy expense rate at IBI.

In 1999, the gross income rate increased to 34.0% from 31.4% in 1998. The rate increase was due to an increase in the merchandise margin rate and a decrease in the buying and occupancy expense rate. The increase in the merchandise margin rate was primarily due to improved inventory management and merchandising strategies at the apparel businesses. The buying and occupancy expense rate decrease was a result of sales leverage at IBI and the benefit from store closings at the apparel businesses.

General, Administrative and Store Operating Expenses

Fourth Quarter

For the fourth quarter of 2000, the general, administrative and store operating expense rate (expressed as a percentage of sales) increased to 22.5% from 21.5% in 1999. The increase was primarily due to a rate increase at IBI from increased investments in store selling at Bath & Body Works and Victoria's Secret Stores in anticipation of the normal holiday sales peak. These investments were not fully leveraged due to a 3% decrease in comparable store sales. The IBI rate increase was offset by sales leverage at the apparel businesses from a 7% comparable store sales increase.

For the fourth quarter of 1999, the general, administrative and store operating expense rate of 21.5% was essentially flat compared to 1998. Improved expense leverage at IBI was offset by a lack of sales leverage and investments in brand building activities at the apparel businesses.

Full Year

In 2000, the general, administrative and store operating expense rate increased to 25.3% from 24.7% in 1999. The increase was primarily due to a rate increase at IBI due to increased investments in store selling at Bath & Body Works and Victoria's Secret Stores. These investments were not fully leveraged in large part due to the difficult fourth quarter that resulted in a full year comparable store sales increase of only 4%. Additionally, Bath & Body Works has continued to expand into highly profitable non-mall locations, which typically have higher payroll costs as a percentage of sales.

In 1999, the general, administrative and store operating expense rate increased to 24.7% from 24.1% in 1998. The increase was primarily due to a rate increase at IBI due to: 1) investments in national advertising for Victoria's Secret, additional store staffing for product extensions, and new initiatives at Victoria's Secret Stores; and 2) a lack of sales leverage and investments in brand building activities at the apparel businesses.

Special and Nonrecurring Items

During the fourth quarter of 2000, the Company recorded a $9.9 million special and nonrecurring charge to close Bath & Body Works' United Kingdom stores. All nine stores are scheduled to close during the first quarter of 2001. The charge consisted of store and other asset write-offs of $4.9 million and accruals for lease termination and other costs of $5.0 million.

In 1999, the Company recognized a $13.1 million charge for transaction costs related to the TOO spin-off and a reversal of a $36.6 million liability related to downsizing costs for Henri Bendel, initially recognized as a special and nonrecurring charge to operating income in 1997. The execution of the plan to downsize the remaining Henri Bendel store in New York was primarily based on negotiations with the original landlord. However, a change in landlords ultimately resulted in the termination of negotiations during the fourth quarter of 1999, which prevented the completion of the original plan. As a result, the Company reversed the $36.6 million liability through the special and nonrecurring items classification.

On May 19, 1998, the Company completed a tax-free exchange offer to establish A&F as an independent company. A total of 94.2 million shares of The Limited's common stock were exchanged at a ratio of 0.86 of a share of A&F common stock for each Limited share tendered. In connection with the exchange, the Company recorded a $1.651 billion tax-free gain. This gain was measured based on the $21.81 per share market value of the A&F common stock at the expiration date of the exchange offer. The remaining 6.2 million A&F shares were distributed through a pro rata spin-off to Limited shareholders.

Also during 1998, the Company recognized a gain of $93.7 million from the sale of its remaining interest in Brylane. This gain was partially offset by a $5.1 million charge for severance and other associate termination costs related to the closing of five of six Henri Bendel stores. The severance charge was paid in 1998.

Operating Income

Fourth Quarter

The operating income rate in the fourth quarter of 2000 (expressed as a percentage of sales) decreased to 13.6% from 18.8% in 1999. Excluding special and nonrecurring items in 2000 and 1999, the fourth quarter operating income rate decreased to 13.8% in 2000 from 17.7% in 1999. The rate decrease was due to a 2.9% decline in the gross income rate and a 1.0% increase in the general, administrative and store operating expense rate.

The operating income rate in the fourth quarter of 1999 increased to 18.8% from 13.6% in 1998. Excluding the special and nonrecurring item in 1999, the fourth quarter operating income rate increased to 17.7% in 1999 from 13.6% in 1998. The rate increase was due to a 3.9% improvement in the gross margin rate, primarily driven by improvement at the apparel businesses.

Full Year

In 2000, the operating income rate was 8.6% versus 9.5% in 1999. Excluding special and nonrecurring items in both years, the operating income rate was 8.7% in 2000 versus 9.3% in 1999. The rate decrease was driven by a 0.6% increase in the general, administrative and store operating expense rate.

In 1999, the operating income rate was 9.5% versus 25.9% in 1998. Excluding special and nonrecurring items in both years, the operating income rate was 9.3% in 1999 versus 7.3% in 1998. The rate improvement was driven by a 2.6% increase in the gross income rate, which more than offset a 0.6% increase in the general, administrative and store operating expense rate.

Interest Expense

In 2000, the Company incurred $16.7 million and $58.2 million in interest expense for the fourth quarter and year, compared to $20.9 million and $78.3 million in 1999 for the same periods. These decreases were primarily the result of lower average borrowings during 2000, due to the maturity of $100 million in term debt in August 1999 and the Company's redemption of $300 million in floating rate notes between November 1999 and February 2000.

	Fourth Quarter		Year		
	2000	1999	2000	1999	1998
Average daily borrowings (millions)	$778	$969	$717	$970	$808
Average effective interest rate	7.6%	8.7%	7.9%	8.1%	8.5%

Other Income, Net

For the fourth quarter of 2000, other income (expense), net, was ($5.0) million versus $3.4 million in 1999. The decrease primarily relates to equity in losses of investees in 2000. For fiscal year 2000, other income was $20.4 million compared to $40.9 million in 1999. The decrease was due equally to a decline in interest income because of lower average invested cash balances and an increase in the equity in losses of investees. The decrease in average invested cash balances was a result of various financing activities in 2000 and 1999 (see "Liquidity and Capital Resources" section on page 9).

Gain on Sale of Subsidiary Stock

As discussed in Note 1 to the Consolidated Financial Statements, effective August 31, 1999, a third party purchased a 60% majority interest in Galyan's. As a result, the Company recorded a pretax gain on sale of subsidiary stock of $11 million, offset by a $6 million provision for taxes. In addition, the revised tax basis of the Company's remaining investment in Galyan's resulted in an additional $7 million deferred tax expense.

Other Data

The following adjusted income information gives effect to the significant transactions and events in 2000, 1999 and 1998 that impacted the comparability of the Company's results. These items are more fully described in the "Special and Nonrecurring Items" section included herein and in Note 2 to the Consolidated Financial Statements.

Management believes this presentation provides a reasonable basis on which to present the adjusted income information. Although the adjusted income information should not be construed as an alternative to the reported results determined in accordance with generally accepted accounting principles, it is provided to assist in investors' understanding of the Company's results of operations.

Adjusted Income Information

(Millions except per share amounts)

	2000			1999			1998		
	Reported	Adjustments	Adjusted	Reported	Adjustments	Adjusted	Reported	Adjustments	Adjusted
Net sales	$10,105	–	$10,105	$9,766	$(222)	$9,544	$9,365	$(528)	$8,837
Gross income	3,437	–	3,437	3,323	(74)	3,249	2,940	(177)	2,763
General, administrative and store operating expenses	(2,561)	–	(2,561)	(2,416)	67	(2,349)	(2,256)	136	(2,120)
Special and nonrecurring items, net	(10)	$10	–	24	(24)	–	1,740	(1,740)	–
Operating income	866	10	876	931	(31)	900	2,424	(1,781)	643
Interest expense	(58)	–	(58)	(78)	–	(78)	(69)	–	(69)
Other income, net	20	–	20	41	–	41	60	–	60
Minority interest	(69)	(1)	(70)	(73)	–	(73)	(64)	2	(62)
Gain on sale of subsidiary stock	–	–	–	11	(11)	–	–	–	–
Income before income taxes	759	9	768	832	(42)	790	2,351	(1,779)	572
Provision for income taxes	331	4	335	371	(26)	345	305	(51)	254
Net income	$428	$5	$433	$461	$(16)	$445	$2,046	$(1,728)	$318
Net income per share	$0.96		$0.97	$1.00		$0.97	$4.15		$0.68
Weighted average shares outstanding	443		443	456		456	493		465

Notes to Adjusted Income Information

A) Excluded businesses

TOO and A&F results were excluded in determining adjusted results for 1999 and 1998 as a result of their spin-off on August 23, 1999 (TOO) and split-off on May 19, 1998 (A&F).

B) Special items

The following special items were excluded in determining adjusted results:

- In 2000, a $9.9 million charge to close Bath & Body Works' nine stores in the United Kingdom.
- In 1999, a $36.6 million reversal of a liability related to downsizing costs for Henri Bendel, an $11.0 million gain from the purchase by a third party of a 60% majority interest in Galyan's and a $13.1 million charge for transaction costs related to the TOO spin-off.
- In 1998, a $1.651 billion tax-free gain on the split-off of A&F, a $93.7 million gain from the sale of the Company's remaining interest in Brylane and a $5.1 million charge for severance and other associate termination costs at Henri Bendel.

C) Provision for income taxes

The tax effect of the adjustments for excluded businesses and special items was calculated using the Company's overall effective rate of 40%. Additionally, in 1999 the Company's $11.0 million pretax gain from the Galyan's transaction described above resulted in a $6.0 million provision for taxes, and the revised tax basis of the Company's remaining investment in Galyan's resulted in an additional $7.0 million deferred tax expense.

D) Weighted average shares outstanding

Total weighted average shares outstanding were reduced as of the beginning of 1998 by the 94.2 million Limited shares tendered in the A&F split-off transaction.

FINANCIAL CONDITION

Liquidity and Capital Resources

Cash provided by operating activities and funds available from commercial paper backed by bank credit agreements provide the resources to support current operations, projected growth, seasonal funding requirements and capital expenditures.

A summary of the Company's working capital position and capitalization follows (millions):

	2000	1999	1998
Cash provided by operating activities	$769	$599	$577
Working capital	$1,068	$1,049	$1,127
Capitalization			
Long-term debt	$400	$400	$550
Shareholders' equity	2,316	2,147	2,167
Total capitalization	$2,716	$2,547	$2,717
Additional amounts available under long-term credit agreements	$1,000	$1,000	$1,000

The Company considers the following to be relevant measures of liquidity and capital resources:

	2000	1999	1998
Debt-to-equity ratio (Long-term debt divided by shareholders' equity)	17%	19%	25%
Debt-to-capitalization ratio (Long-term debt divided by total capitalization)	15%	16%	20%
Interest coverage ratio (Income, excluding special and nonrecurring items and gain on sale of subsidiary stock, before interest expense, income taxes, depreciation and amortization divided by interest expense)	19x	15x	14x
Cash flow to capital investment (Net cash provided by operating activities divided by capital expenditures)	172%	159%	166%

The Company's operations are seasonal in nature and consist of two principal selling seasons: spring (the first and second quarters) and fall (the third and fourth quarters). The fourth quarter, including the holiday season, has accounted for 35%, 34% and 35% of net sales in 2000, 1999 and 1998. Accordingly, cash requirements are highest in the third quarter as the Company's inventory builds in anticipation of the holiday season, which generates a substantial portion of the Company's operating cash flow for the year.

Operating Activities

Net cash provided by operating activities, the Company's primary source of liquidity, was $769 million in 2000, $599 million in 1999 and $577 million in 1998.

The primary differences in cash provided by operating activities between 2000 and 1999 were due to changes in inventories, accounts payable, accrued expenses and income taxes. The cash used for inventories was higher in 2000 than 1999 because of relatively higher inventories at the apparel businesses at February 3, 2001. The net increase in accounts payable and accrued expenses versus 1999 related to higher inventories and timing of payments. The reduction in the change in income tax accruals primarily related to a 1999 payment of $112 million for taxes and interest related to an Internal Revenue Service assessment for previous year's taxes (see Note 6 to the Consolidated Financial Statements).

The primary differences in cash provided by operating activities between 1999 and 1998 were due to significant improvement in net income excluding special and nonrecurring items and changes in inventories and income taxes.

Investing Activities

In 2000, major investing activities included $446 million in capital expenditures (see "Capital Expenditures" section on page 10), and $22 million in net expenditures associated with the Easton project (see "Easton Real Estate Investment" section on page 10).

In 1999, investing activities included the following: 1) $352 million decrease in restricted cash related to the rescission of the Contingent Stock Redemption Agreement; 2) $182 million in proceeds from the third party purchase of a 60% majority interest in Galyan's and the sale of related property; 3) $375 million in capital expenditures; and 4) $11 million in net proceeds associated with the Easton project.

In 1998, major investing activities included $347 million in capital expenditures, $131 million in proceeds from the sale of the Company's remaining investment in Brylane, Inc. and $31 million in net proceeds associated with the Easton project.

Financing Activities

Financing activities in 2000 included repayment of $150 million of term debt, redemption of the $100 million Series C floating rate notes and quarterly dividend payments of $0.075 per share or $128 million for the year. In addition, the Company repurchased 8.7 million shares of its common stock for $200 million. Finally, in 2000, IBI repurchased 8.8 million shares of its common stock for $198 million, of which 7.4 million shares were repurchased on a proportionate basis from The Limited for $167 million. The repurchase had no net cash flow impact to The Limited and did not change The Limited's 84% ownership interest in IBI.

Noncash financing activities in 2000 included a two-for-one stock split in the form of a stock dividend distributed on May 30, 2000 to shareholders of record on May 12, 2000. Shareholders' equity reflects the reclassification of an amount equal to the par value of the increase in issued common shares ($108 million) from paid-in capital to common stock. Also, in conjunction with the stock split, the Company retired 163.7 million treasury shares, representing $4.3 billion at cost. A noncash charge was made against retained earnings for the excess cost of treasury stock over its par value.

Financing activities in 1999 included proceeds of $300 million from floating rate notes, $200 million of which was repaid during the year, repayment of $100 million of term debt and quarterly dividend payments of $0.075 per share or $130 million for the year. The cash from the rescission of the Contingent Stock Redemption Agreement and other available funds were used to repurchase shares under a self-tender, which was funded June 14, 1999. A total of 30 million shares of the Company's common stock were repurchased at $25 per share, resulting in a cash outflow of $750 million plus transaction costs. Additionally, IBI completed a $500 million stock repurchase program that began in 1998 through the repurchase of 20.4 million shares of its common stock for $404 million, of which 17.2 million shares were repurchased on a proportionate basis from The Limited for $342 million. Financing activities also included a $50 million dividend and a $12 million repayment of advances to TOO in connection with its spin-off.

Financing activities in 1998 included three stock repurchases: one by the Company and two by IBI. First, to reduce the impact of dilution from the exercise of stock options, the Company used $43 million of proceeds from stock option exercises to repurchase 3.8 million shares of its common stock. Second, in January 1999, IBI initiated the $500 million stock repurchase program and repurchased 5.5 million shares of its common stock for $96 million, of which 4.6 million shares were repurchased on a proportionate basis from The Limited for $81 million. Finally, under a repurchase program completed in August 1998, IBI repurchased 9.4 million shares of its common stock from its public shareholders for $106 million. These repurchased shares were specifically reserved to cover shares needed for employee benefit plans. Other financing activities in 1998 included quarterly dividend payments of $0.065 per share or $124 million for the year, and the payment of $48 million to settle the A&F intercompany balance at May 19, 1998, the date of its split-off.

The Company has available $1 billion under its long-term credit agreement, none of which was used as of February 3, 2001. Borrowings under the agreement, if any, are due September 28, 2002. The Company also has the ability to offer up to $250 million of additional debt securities under its shelf registration statement.

STORES AND SELLING SQUARE FEET

A summary of stores and selling square feet by business follows:

		End of Year		Change From	
	Plan 2001	2000	1999	2001–2000	2000–1999
Express					
Stores	653	667	688	(14)	(21)
Selling square feet	4,172,000	4,288,000	4,429,000	(116,000)	(141,000)
Lerner New York					
Stores	515	560	594	(45)	(34)
Selling square feet	3,761,000	4,163,000	4,592,000	(402,000)	(429,000)
Lane Bryant					
Stores	652	653	688	(1)	(35)
Selling square feet	3,135,000	3,162,000	3,343,000	(27,000)	(181,000)
Limited Stores					
Stores	374	389	443	(15)	(54)
Selling square feet	2,326,000	2,445,000	2,749,000	(119,000)	(304,000)
Structure					
Stores	446	469	499	(23)	(30)
Selling square feet	1,782,000	1,885,000	1,978,000	(103,000)	(93,000)
Total apparel businesses					
Stores	2,640	2,738	2,912	(98)	(174)
Selling square feet	15,176,000	15,943,000	17,091,000	(767,000)	(1,148,000)
Victoria's Secret Stores					
Stores	1,019	958	896	61	62
Selling square feet	4,610,000	4,207,000	3,976,000	403,000	231,000
Bath & Body Works					
Stores	1,635	1,432	1,214	203	218
Selling square feet	3,544,000	3,039,000	2,490,000	505,000	549,000
Total Intimate Brands					
Stores	2,654	2,390	2,110	264	280
Selling square feet	8,154,000	7,246,000	6,466,000	908,000	780,000
Henri Bendel					
Stores	1	1	1	–	–
Selling square feet	35,000	35,000	35,000	–	–
Total retail businesses					
Stores	5,295	5,129	5,023	166	106
Selling square feet	23,365,000	23,224,000	23,592,000	141,000	(368,000)

Capital Expenditures

Capital expenditures amounted to $446 million, $375 million and $347 million for 2000, 1999 and 1998, of which $324 million, $277 million and $237 million were for new stores and for the remodeling of and improvements to existing stores. Remaining capital expenditures are primarily related to information technology, distribution centers and investments in intellectual property assets.

The Company anticipates spending $470 to $500 million for capital expenditures in 2001, of which $330 to $360 million will be for new stores and for the remodeling of and improvements to existing stores. Remaining capital expenditures are primarily related to information technology and distribution centers. The Company expects that 2001 capital expenditures will be funded principally by net cash provided by operating activities.

The Company expects to increase selling square footage by approximately 140,000 square feet in 2001. It is anticipated that the increase will result from the addition of approximately 300 to 340 stores (primarily within IBI), offset by the closing of approximately 150 stores (primarily within the apparel businesses).

Easton Real Estate Investment

The Company's real estate investments include Easton, a 1,200-acre planned community in Columbus, Ohio, that integrates office, hotel, retail, residential and recreational space. The Company's investments in partnerships, land and infrastructure within the Easton property were $74 million at February 3, 2001 and $54 million at January 29, 2000.

Included in these investments is a non-controlling interest in a partnership that owns and is developing the Easton Town Center, a commercial entertainment and shopping center. During 2000, the Company and its partners modified their agreement and the partnership borrowings in order to develop the "Fashion District" in the Easton Town Center. The partnership's principal funding source is a $189 million secured loan, $126 million of which was outstanding at February 3, 2001. The Company and one of its partners have guaranteed the first $75 million of this loan. The Company does not anticipate that it will be required to advance funds to the Easton Town Center partnership in order for the partnership to meet its debt service costs on these loans. The Company and one of its partners have also guaranteed the completion of the Fashion District and indemnified the lender against any environmental matters related to the Easton Town Center.

In 2000, Company cash expenditures for the Easton development totaled $30 million, including a loan to the partnership of $18 million, and the Company received net sales and other proceeds totaling $8 million. In 1999 and 1998, the Company received net sales and other proceeds of $32 million and $65 million, which exceeded its cash expenditures of $21 million and $34 million.

Recently Issued Accounting Pronouncements

Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities," subsequently amended and clarified by SFAS No. 138, is effective for the Company's 2001 fiscal year. It requires that derivative instruments be recorded at fair value and that changes in their fair value be recognized in current earnings unless specific hedging criteria are met. The Company's use of derivatives is limited, and the adoption of SFAS No. 133 will not have a material impact on its consolidated financial statements.

Emerging Issues Task Force ("EITF") Issue No. 00-14, "Accounting for Certain Sales Incentives," will be effective in the second quarter of 2001 and addresses the accounting and classification of various sales incentives. The Company has determined that adopting the provisions of the EITF Issue will not have a material impact on its consolidated financial statements.

Market Risk

Management believes the Company's exposure to interest rate and market risk associated with financial instruments (such as investments and borrowings) is not material.

Impact of Inflation

The Company's results of operations and financial condition are presented based on historical cost. While it is difficult to accurately measure the impact of inflation due to the imprecise nature of the estimates required, the Company believes the effects of inflation, if any, on the results of operations and financial condition have been minor.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995

The Company cautions that any forward-looking statements (as such term is defined in the Private Securities Litigation Reform Act of 1995) contained in this Report or made by management of the Company involve risks and uncertainties and are subject to change based on various important factors, many of which may be beyond the Company's control. Accordingly, the Company's future performance and financial results may differ materially from those expressed or implied in any such forward-looking statements. The following factors, among others, in some cases have affected and in the future could affect the Company's financial performance and actual results and could cause actual results for 2001 and beyond to differ materially from those expressed or implied in any forward-looking statements included in this Report or otherwise made by management: changes in consumer spending patterns, consumer preferences and overall economic conditions, the impact of competition and pricing, changes in weather patterns, political stability, currency and exchange risks and changes in existing or potential duties, tariffs or quotas, postal rate increases and charges, paper and printing costs, the availability of suitable store locations at appropriate terms, the ability to develop new merchandise and the ability to hire and train associates. The Company does not undertake to publicly update or revise its forward-looking statements even if experience or future changes make it clear that any projected results expressed or implied therein will not be realized.

CONSOLIDATED STATEMENTS OF INCOME

(Thousands except per share amounts)

	2000	1999	1998
Net sales	$10,104,606	$9,766,220	$9,364,750
Costs of goods sold, buying and occupancy	(6,667,389)	(6,443,063)	(6,424,725)
Gross income	3,437,217	3,323,157	2,940,025
General, administrative and store operating expenses	(2,561,201)	(2,415,849)	(2,256,332)
Special and nonrecurring items, net	(9,900)	23,501	1,740,030
Operating income	866,116	930,809	2,423,723
Interest expense	(58,244)	(78,297)	(68,528)
Other income, net	20,378	40,868	59,915
Minority interest	(69,345)	(72,623)	(63,616)
Gain on sale of subsidiary stock	–	11,002	–
Income before income taxes	758,905	831,759	2,351,494
Provision for income taxes	331,000	371,000	305,000
Net income	$427,905	$460,759	$2,046,494
Net income per share:			
Basic	$1.00	$1.05	$4.25
Diluted	$0.96	$1.00	$4.15

The accompanying Notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Thousands)

	Common Stock				Treasury	Total
	Shares Outstanding	Par Value	Paid-In Capital	Retained Earnings	Stock, at Average Cost	Shareholders' Equity
Balance, January 31, 1998	545,600	$180,352	$148,018	$3,553,982	$(1,896,587)	$1,985,765
Net income	–	–	–	2,046,494	–	2,046,494
Cash dividends	–	–	–	(124,203)	–	(124,203)
Repurchase of common stock	(3,780)	–	–	–	(43,095)	(43,095)
Split-off of Abercrombie & Fitch	(94,150)	–	–	(5,584)	(1,766,138)	(1,771,722)
Exercise of stock options and other	5,474	–	9,196	–	64,524	73,720
Balance, January 30, 1999	453,144	$180,352	$157,214	$5,470,689	$(3,641,296)	$2,166,959
Net income	–	–	–	460,759	–	460,759
Cash dividends	–	–	–	(130,449)	–	(130,449)
Repurchase of common stock, including transaction costs	(30,000)	–	–	–	(752,612)	(752,612)
Spin-off of Limited Too	–	–	–	(24,675)	–	(24,675)
Rescission of contingent stock redemption agreement	–	9,375	7,639	334,586	–	351,600
Exercise of stock options and other	6,784	–	13,521	(1,539)	63,513	75,495
Balance, January 29, 2000	429,928	$189,727	$178,374	$6,109,371	$(4,330,395)	$2,147,077
Net income	–	–	–	427,905	–	427,905
Cash dividends	–	–	–	(127,549)	–	(127,549)
Repurchase of common stock, including transaction costs	(8,746)	–	–	–	(199,985)	(199,985)
Retirement of treasury stock	–	(81,869)	–	(4,241,052)	4,322,921	–
Two-for-one stock split	–	107,858	(107,858)	–	–	–
Exercise of stock options and other	4,761	380	12,987	(806)	56,446	69,007
Balance, February 3, 2001	425,943	$216,096	$83,503	$2,167,869	$(151,013)	$2,316,455

The accompanying Notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS

(Thousands)

Assets	February 3, 2001	January 29, 2000
Current assets		
Cash and equivalents	$563,547	$817,268
Accounts receivable	93,745	108,794
Inventories	1,157,140	1,050,913
Other	253,366	307,780
Total current assets	2,067,798	2,284,755
Property and equipment, net	1,394,619	1,229,612
Deferred income taxes	132,028	125,145
Other assets	493,677	486,655
Total assets	$4,088,122	$4,126,167
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable	$273,021	$256,306
Current portion of long-term debt	–	250,000
Accrued expenses	581,584	538,310
Income taxes	145,580	190,936
Total current liabilities	1,000,185	1,235,552
Long-term debt	400,000	400,000
Other long-term liabilities	228,397	224,530
Minority interest	143,085	119,008
Shareholders' equity		
Common stock	216,096	189,727
Paid-in capital	83,503	178,374
Retained earnings	2,167,869	6,109,371
	2,467,468	6,477,472
Less: treasury stock, at average cost	(151,013)	(4,330,395)
Total shareholders' equity	2,316,455	2,147,077
Total liabilities and shareholders' equity	$4,088,122	$4,126,167

The accompanying Notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Thousands)

Operating Activities	2000	1999	1998
Net income	$427,905	$460,759	$2,046,494
Adjustments to reconcile net income to net cash provided by (used for) operating activities:			
Depreciation and amortization	271,146	272,443	286,000
Special and nonrecurring items, net of income taxes	5,900	(13,501)	(1,705,030)
Minority interest, net of dividends paid	47,046	50,517	40,838
Loss on sale of subsidiary stock, net of income taxes	–	2,198	–
Change in Assets and Liabilities			
Accounts receivable	15,049	(36,775)	4,704
Inventories	(106,227)	(54,270)	(153,667)
Accounts payable and accrued expenses	52,989	(20,201)	45,580
Income taxes	(9,761)	(83,637)	25,895
Other assets and liabilities	65,048	21,208	(13,439)
Net cash provided by operating activities	769,095	598,741	577,375
Investing Activities			
Capital expenditures	(446,176)	(375,405)	(347,356)
Net proceeds (expenditures) related to Easton real estate investment	(22,485)	10,635	31,073
Net proceeds from sale of partial interest in subsidiary and investee	–	182,000	131,262
Decrease in restricted cash	–	351,600	–
Net cash provided by (used for) investing activities	(468,661)	168,830	(185,021)
Financing Activities			
Repayment of long-term debt	(250,000)	(300,000)	–
Proceeds from issuance of long-term debt	–	300,000	–
Repurchase of common stock, including transaction costs	(199,985)	(752,612)	(43,095)
Repurchase of Intimate Brands, Inc. common stock	(31,391)	(62,639)	(120,844)
Dividends paid	(127,549)	(130,449)	(124,203)
Dividend received from Limited Too	–	50,000	–
Settlement of Limited Too (1999) and Abercrombie & Fitch (1998) intercompany accounts	–	12,000	(47,649)
Proceeds from exercise of stock options and other	54,770	63,080	67,359
Net cash used for financing activities	(554,155)	(820,620)	(268,432)
Net increase (decrease) in cash and equivalents	(253,721)	(53,049)	123,922
Cash and equivalents, beginning of year	817,268	870,317	746,395
Cash and equivalents, end of year	$563,547	$817,268	$870,317

The accompanying Notes are an integral part of these Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

Principles of Consolidation

The Limited, Inc. (the "Company") sells women's and men's apparel, women's intimate apparel and personal care products under various trade names through its specialty retail stores and direct response (catalog and e-commerce) businesses.

The consolidated financial statements include the accounts of the Company and its subsidiaries, including Intimate Brands, Inc. ("IBI"), an 84%-owned subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation. The consolidated financial statements include the results of Galyan's Trading Co. ("Galyan's") through August 31, 1999, when a third party purchased a majority interest; Limited Too ("TOO") through August 23, 1999, when it was established as an independent company; and Abercrombie & Fitch ("A&F") through May 19, 1998, when it was established as an independent company.

Investments in unconsolidated affiliates over which the Company exercises significant influence but does not have control, including Galyan's for periods after August 31, 1999, are accounted for using the equity method. The Company's share of the net income or loss of those unconsolidated affiliates is included in other income (expense).

Fiscal Year

The Company's fiscal year ends on the Saturday closest to January 31. Fiscal years are designated in the financial statements and notes by the calendar year in which the fiscal year commences. The results for fiscal year 2000 represent the fifty-three-week period ended February 3, 2001 and results for fiscal years 1999 and 1998 represent the fifty-two-week periods ended January 29, 2000 and January 30, 1999.

Cash and Equivalents

Cash and equivalents include amounts on deposit with financial institutions and money market investments with original maturities of less than 90 days.

Inventories

Inventories are principally valued at the lower of average cost or market, on a first-in first-out basis, using the retail method.

Store Supplies

The initial shipment of selling-related supplies (including, but not limited to, hangers, signage, security tags and packaging) is capitalized at the store opening date. In lieu of amortizing the initial balance, subsequent shipments are expensed, except for new merchandise presentation programs, which are capitalized. Store supplies are periodically adjusted as appropriate for changes in actual quantities or costs.

Direct Response Advertising

Direct response advertising relates primarily to the production and distribution of the Company's catalogs and is amortized over the expected future revenue stream, which is principally three months from the date catalogs are mailed. All other advertising costs are expensed at the time the promotion first appears in media or in the store. Catalog and advertising costs amounted to $359 million, $324 million and $303 million in 2000, 1999 and 1998.

Long-lived Assets

Depreciation and amortization of property and equipment are computed for financial reporting purposes on a straight-line basis, using service lives ranging principally from 10 to 15 years for building and leasehold improvements, and 3 to 10 years for other property and equipment. The cost of assets sold or retired and the related accumulated depreciation or amortization are removed from the accounts with any resulting gain or loss included in net income. Maintenance and repairs

re charged to expense as incurred. Major renewals and betterments that extend service lives are capitalized.

Goodwill is amortized on a straight-line basis over 30 years. Additionally, goodwill related to a 1998 buyback of IBI stock reverses as the shares are reissued to cover shares needed for employee benefit plans. The cost of intellectual property assets is amortized based on the sell-through of the related products, over the shorter of the term of the license agreement or the estimated useful life of the asset, not to exceed 10 years.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that full recoverability is questionable. Factors used in the valuation include, but are not limited to, management's plans for future operations, brand initiatives, recent operating results and projected cash flows.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized based on the difference between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect in the years when those temporary differences are expected to reverse. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date.

Shareholders' Equity

At February 3, 2001, 500 million shares of $0.50 par value common stock were authorized and 432.2 million shares were issued. At February 3, 2001 and January 29, 2000, 425.9 million shares and 429.9 million shares were outstanding. Ten million shares of $1.00 par value preferred stock were authorized, none of which were issued.

On May 2, 2000, the Company declared a two-for-one stock split ("stock split") in the form of a stock dividend distributed on May 30, 2000 to shareholders of record on May 12, 2000. Shareholders' equity reflects the reclassification of an amount equal to the par value of the increase in issued common shares ($107.9 million) from paid-in capital to common stock. In conjunction with the stock split, the Company retired 163.7 million treasury shares with a cost of $4.3 billion. A noncash charge was made against retained earnings for the excess cost of treasury stock over its par value. All share and per share data throughout this report has been restated to reflect the stock split.

Also in 2000, the Company repurchased 8.7 million shares of its common stock for $200 million.

On June 3, 1999, the Company completed an issuer tender offer by purchasing 30 million shares of its common stock at $25 per share and on May 19, 1998, the Company acquired 94.2 million shares of its common stock via a tax-free exchange offer to establish A&F as an independent company (see Note 2).

Revenue Recognition

The Company recognizes sales upon customer receipt of the merchandise. Shipping and handling revenues are included in net sales and the related costs are included in costs of goods sold, buying and occupancy. Revenue for gift certificate sales and store credits is recognized at redemption. A reserve is provided for projected merchandise returns based on prior experience.

The Company's revenue recognition policy is consistent with the guidance contained in the Securities and Exchange Commission's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements," the adoption of which did not have a material effect on the consolidated financial statements.

Earnings Per Share

Net income per share is computed in accordance with Statement of Financial Accounting Standards ("SFAS") No. 128, "Earnings Per Share." Earnings per basic share is computed based on the weighted average number of outstanding common shares. Earnings per diluted share includes the weighted average effect of dilutive options and restricted stock on the weighted average shares outstanding. Additionally, earnings per diluted share includes the impact of the dilutive options and restricted stock at IBI as a reduction to earnings. This resulted in a $0.01 reduction to 2000 and 1999 earnings per diluted share and no impact to 1998 earnings per diluted share.

(Thousands)

Weighted Average Common Shares Outstanding	2000	1999	1998
Basic shares	427,604	439,164	481,814
Effect of dilutive options and restricted stock	15,444	16,400	10,824
Diluted shares	443,048	455,564	492,638

The computation of earnings per diluted share excludes options to purchase 1.1 million, 0.6 million and 4.4 million shares of common stock in 2000, 1999 and 1998, because the options' exercise price was greater than the average market price of the common shares during the year. In addition, shares that were previously subject to the Contingent Stock Redemption Agreement (see Note 8) were excluded from the dilution calculation in 1998 because their redemption would not have had a dilutive effect on earnings per share.

Gains on Sale of Subsidiary Stock

Gains in connection with the sale of subsidiary stock are recognized in the period the transaction is closed.

Effective August 31, 1999, an affiliate of Freeman, Spogli & Co. (together with Galyan's management) purchased a 60% majority interest in Galyan's, and the Company retained a 40% interest. In addition, the Company sold certain property for $71 million to a third party, which then leased the property to Galyan's under operating leases. The Company received total cash proceeds from these transactions of approximately $182 million, as well as subordinated debt and warrants of $20 million from Galyan's. During the first five years, interest (at 12% to 13%) on the subordinated debt may be paid in kind rather than in cash. The transactions resulted in a third quarter pretax gain on sale of subsidiary stock of $11 million, offset by a $6 million provision for taxes. In addition, the revised tax basis of the Company's remaining investment in Galyan's resulted in an additional $7 million deferred tax expense.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Because actual results may differ from those estimates, the Company revises its estimates and assumptions as new information becomes available.

Reclassifications

In the fourth quarter of 2000, the Company adopted Emerging Issues Task Force ("EITF") Issue No. 00-10, "Accounting for Shipping and Handling Fees and Costs." As a result, the Company reclassified shipping and handling revenues from general, administrative and store operating expenses to net sales. The related shipping costs were reclassified from general, administrative and store operating expenses to costs of goods sold, buying and occupancy. Additionally, the Company has classified discounts on sales to associates as a reduction to net sales. Such discounts were previously recorded in general, administrative and store operating expenses. These and certain other prior year amounts have been reclassified to conform to the current year presentation.

2. Special and Nonrecurring Items

During the fourth quarter of 2000, the Company recorded a $9.9 million special and nonrecurring charge to close Bath & Body Works' United Kingdom stores. All nine stores are scheduled to close during the first quarter of 2001. The charge consisted of store and other asset write-offs of $4.9 million and accruals for lease termination and other costs of $5.0 million.

During the fourth quarter of 1999, the Company recognized the reversal of a $36.6 million liability related to downsizing costs for Henri Bendel, initially recognized as a special and nonrecurring charge to operating income in 1997. The execution of the plan to downsize the remaining Henri Bendel store in New York was primarily based on negotiations with the original landlord. However, a change in landlords ultimately resulted in the termination of negotiations during the fourth quarter of 1999, which prevented the completion of the original plan. As a result, the Company reversed the $36.6 million liability through the special and nonrecurring items classification.

On July 15, 1999, the Company's Board of Directors approved a formal plan to spin-off Limited Too. The record date for the spin-off was August 11, 1999, with Limited shareholders receiving one share of Too, Inc. (the successor company to Limited Too) common stock for every seven shares of Limited common stock held on that date. The spin-off was completed on August 23, 1999. The Company recorded the spin-off as a $25 million dividend, which represented the carrying value of the net assets underlying the common stock distributed. As part of the transaction, the Company received total proceeds of $62 million that included a $50 million dividend from TOO and a $12 million repayment of advances to TOO. During the second quarter of 1999, the Company recognized a $13.1 million charge for transaction costs related to the spin-off.

On May 19, 1998, the Company completed a tax-free exchange offer to establish A&F as an independent company. A total of 94.2 million shares of the Company's common stock were exchanged at a ratio of 0.86 of a share of A&F common stock for each Limited share tendered. In connection with the exchange, the Company recorded a $1.651 billion tax-free gain. This gain was measured based on the $21.81 per share market value of the A&F common stock at the expiration date of the exchange offer. In addition, on June 1, 1998, a $5.6 million dividend was effected through a pro rata spin-off to shareholders of the Company's remaining 6.2 million A&F shares. Limited shareholders of record as of the close of trading on May 29, 1998 received .013673 of a share of A&F for each Limited share owned at that time.

During the first quarter of 1998, the Company recognized a gain of $93.7 million from the sale of 2.57 million shares of Brylane at $51 per share, representing its remaining interest in Brylane. This gain was partially offset by a $5.1 million charge for severance and other associate termination costs related to the closing of five of six Henri Bendel stores. The severance charge was paid in 1998.

14 3. Property and Equipment, Net

(Thousands)

Property and Equipment, at Cost	2000	1999
Land, buildings and improvements	$362,997	$390,121
Furniture, fixtures and equipment	2,079,567	2,020,651
Leaseholds and improvements	655,736	498,232
Construction in progress	46,748	35,823
Total	3,145,048	2,944,827
Less: accumulated depreciation and amortization	1,750,429	1,715,215
Property and equipment, net	$1,394,619	$1,229,612

4. Leased Facilities, Commitments and Contingencies

Annual store rent consists of a fixed minimum amount and/or contingent rent based on a percentage of sales exceeding a stipulated amount. Store lease terms generally require additional payments covering taxes, common area costs and certain other expenses.

For leases that contain predetermined fixed escalations of the minimum rentals and/or rent abatements, the Company recognizes the related rental expense on a straight-line basis and records the difference between the recognized rental expense and amounts payable under the leases as deferred lease credits, which are included in other long-term liabilities. At February 3, 2001 and January 29, 2000, this liability amounted to $106.9 million and $124.5 million.

(Thousands)

Rent Expense	2000	1999	1998
Store rent			
Fixed minimum	$624,769	$635,543	$666,729
Contingent	57,300	53,371	39,642
Total store rent	682,069	688,914	706,371
Equipment and other	29,051	32,201	22,511
Total rent expense	$711,120	$721,115	$728,882

At February 3, 2001, the Company was committed to noncancelable leases with remaining terms generally from one to twenty years. A substantial portion of these commitments consists of store leases with initial terms ranging from ten to twenty years, with options to renew at varying terms.

(Thousands)

Minimum Rent Commitments Under Noncancelable Leases	
2001	$644,469
2002	611,467
2003	562,669
2004	507,577
2005	441,874
Thereafter	959,268

The Company has a non-controlling interest in a partnership that owns and is developing the Easton Town Center, a commercial entertainment and shopping center in Columbus, Ohio. The partnership's principal funding source is a $189 million secured loan, $126 million of which was outstanding at February 3, 2001. The Company and one of its partners have guaranteed the first $75 million of this loan and completion of the "Fashion District" within the Easton Town Center. The Company and one of its partners have also indemnified the lender against any environmental matters related to the Easton Town Center.

5. Accrued Expenses

(Thousands)

Accrued Expenses	2000	1999
Compensation, payroll taxes and benefits	$84,885	$110,803
Deferred revenue	130,729	125,500
Taxes, other than income	56,782	46,878
Interest	10,504	18,053
Other	298,684	237,076
Total	$581,584	$538,310

6. Income Taxes

(Thousands)

Provision for Income Taxes	2000	1999	1998
Currently payable			
Federal	$251,700	$389,000	$194,100
State	27,700	58,000	38,800
Foreign	6,000	2,100	4,500
Total	285,400	449,100	237,400
Deferred			
Federal	16,500	(82,100)	53,100
State	29,100	4,000	14,500
Total	45,600	(78,100)	67,600
Total provision	$331,000	$371,000	$305,000

The foreign component of pretax income, arising principally from overseas sourcing operations, was $69.7 million, $41.5 million and $65.5 million in 2000, 1999 and 1998.

Reconciliation Between the Statutory Federal Income Tax Rate and the Effective Tax Rate	2000	1999	1998
Federal income tax rate	35.0%	35.0%	35.0%
State income taxes, net of Federal income tax effect	4.5%	4.5%	4.5%
Other items, net	0.5%	0.5%	0.4%
Total	40.0%	40.0%	39.9%

The reconciliation between the statutory Federal income tax rate and the effective income tax rate on pretax earnings excludes minority interest and, in 1998, the nontaxable gain from the split-off of A&F.

Income taxes payable included net current deferred tax liabilities of $14.1 million at February 3, 2001. Other current assets included net current deferred tax assets of $38.5 million at January 29, 2000. Income tax payments were $315.5 million, $408.8 million and $241.7 million for 2000, 1999 and 1998.

The Internal Revenue Service has assessed the Company for additional taxes and interest for the years 1992 to 1996 relating to the undistributed earnings of foreign affiliates for which the Company has provided deferred taxes. On September 7, 1999, the United States Tax Court sustained the position of the IRS with respect to the 1992 year. In connection with an appeal of the Tax Court judgment, in 1999 the Company made a $112 million payment of taxes and interest for the years 1992 to 1998 that reduced deferred tax liabilities. Management believes the ultimate resolution of this matter will not have a material adverse effect on the Company's results of operations or financial condition.

(Thousands)

Effect of Temporary Differences That Give Rise to Deferred Income Taxes	2000 Assets	2000 Liabilities	2000 Total	1999 Assets	1999 Liabilities	1999 Total
Tax under book depreciation	$3,400	–	$3,400	$14,800	–	$14,800
Undistributed earnings of foreign affiliates	–	$(34,700)	(34,700)	–	$(28,100)	(28,100)
Special and nonrecurring items	30,100	–	30,100	37,100	–	37,100
Rent	24,400	–	24,400	54,900	–	54,900
Inventory	25,200	–	25,200	46,300	–	46,300
Investments in unconsolidated affiliates	5,500	–	5,500	–	(3,800)	(3,800)
State income taxes	41,200	–	41,200	34,000	–	34,000
Other, net	22,900	–	22,900	55,200	(46,800)	8,400
Total deferred income taxes	$152,700	$(34,700)	$118,000	$242,300	$(78,700)	$163,600

7. Long-term Debt

(Thousands)

Unsecured Long-term Debt	2000	1999
7½% Debentures due March 2023	$250,000	$250,000
7⅘% Notes due May 2002	150,000	150,000
9⅛% Notes due February 2001	–	150,000
Floating rate notes	–	100,000
	400,000	650,000
Less: current portion of long-term debt	–	250,000
Total	$400,000	$400,000

The 7½% debentures may be redeemed at the option of the Company, in whole or in part, at any time on or after March 15, 2003, at declining premiums.

The Company maintains a $1 billion unsecured revolving credit agreement (the "Agreement"), established on September 29, 1997. Borrowings outstanding under the Agreement, if any, are due September 28, 2002. However, the revolving term of the Agreement may be extended an additional two years upon notification by the Company on September 29, 2001, subject to the approval of the lending banks. The Agreement has several borrowing options, including interest rates that are based on either the lender's "base rate," as defined, LIBOR, CD-based options or at a rate submitted under a bidding process. Facilities fees payable under the Agreement are based on the Company's long-term credit ratings, and currently approximate 0.1% of the committed amount per annum.

The Agreement supports the Company's commercial paper program, which is used from time to time to fund working capital and other general corporate requirements. No commercial paper or amounts under the Agreement were outstanding at February 3, 2001 and January 29, 2000. The Agreement contains covenants relating to the Company's working capital, debt and net worth.

The Company has a shelf registration statement, under which up to $250 million of debt securities and warrants to purchase debt securities may be issued.

Interest paid was $65.8 million, $81.3 million and $68.6 million in 2000, 1999 and 1998.

8. Contingent Stock Redemption Agreement and Restricted Cash

On May 3, 1999, the Company, Leslie H. Wexner, Chairman and CEO of the Company, and The Wexner Children's Trust (the "Trust") entered into an agreement (the "Rescission

greement") rescinding the Contingent Stock Redemption greement dated as of January 26, 1996, as amended, among he Company, Mr. Wexner and the Trust. Pursuant to the escission Agreement, the rights and obligations of the ompany, Mr. Wexner and the Trust under the Contingent Stock edemption Agreement were terminated, and the Company sed the $351.6 million of restricted cash to purchase shares in he Company's tender offer, which expired on June 1, 1999.

The Company earned interest of $4.1 million and $17.9 milion in 1999 and 1998 on the restricted cash.

. Stock Options and Restricted Stock

Jnder the Company's stock plans, associates may be granted ıp to a total of 62.9 million restricted shares and options to urchase the Company's common stock at the market price n the date of grant. Options generally vest 25% per year ver the first four years of the grant. Of the options granted,).6 million in 2000, 5.0 million in 1999 and 4.6 million in 1998 had graduated vesting schedules of six or more years. Options have a maximum term of ten years.

Under separate IBI stock plans, IBI associates may be granted up to a total of 36.8 million restricted shares and options o purchase IBI's common stock at the market price on the late of grant. As of February 3, 2001, options to purchase 14.5 million IBI shares were outstanding, of which 4.6 million options were exercisable. Under these plans, options generally vest over periods from four to six years.

The Company measures compensation expense under APB Opinion No. 25, "Accounting for Stock Issued to Employees," and no compensation expense has been recognized for its stock option plans. In accordance with SFAS No. 123, "Accounting for Stock-Based Compensation," the fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model discussed below. If compensation expense had been determined using the estimated fair value of options under SFAS No. 123, the pro forma effects on net income and earnings per share, including the impact of options issued by IBI, would have been a reduction of approximately $22.3 million or $0.05 per share in 2000, $18.7 million or $0.04 per share in 1999 and $13.9 million or $0.03 per share in 1998.

The weighted average per share fair value of options granted ($5.19, $5.64 and $4.16 during 2000, 1999 and 1998) was used to calculate the pro forma compensation expense. The fair value was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions for 2000, 1999 and 1998: dividend yields of 2.3%, 2.1% and 2.2%; volatility of 36%, 32% and 29%; risk-free interest rates of 5%, 7% and 5%; assumed forfeiture rates of 20%, 20% and 20%; and expected lives of 4.3 years, 5.2 years and 6.3 years.

Restricted Shares

Approximately 41,000, 1,040,000 and 1,716,000 restricted Limited shares were granted in 2000, 1999 and 1998, with market values at date of grant of $0.7 million, $18.5 million and $27.4 million. Restricted shares generally vest either on a graduated scale over four years or 100% at the end of a fixed vesting period, principally five years. In 1999, 100,000 restricted shares were granted with a graduated vesting schedule over six years. Approximately 314,000 restricted shares granted in 1999 include performance requirements, all of which were met.

Additionally, the expense recognized from the issuance of IBI restricted stock grants impacted the Company's consolidated results. IBI granted 59,000, 340,000 and 850,000 restricted shares in 2000, 1999 and 1998. Vesting terms for the IBI restricted shares are similar to those of The Limited. The market value of restricted shares is being amortized as compensation expense over the vesting period, generally four to six years. Compensation expense related to restricted stock awards, including expense related to awards granted at IBI, amounted to $15.0 million in 2000, $28.8 million in 1999 and $31.3 million in 1998.

10. Retirement Benefits

The Company sponsors a qualified defined contribution retirement plan and a nonqualified supplemental retirement plan. Participation in the qualified plan is available to all associates who have completed 1,000 or more hours of service with the Company during certain 12-month periods and attained the age of 21. Participation in the nonqualified plan is subject to service and compensation requirements. Company contributions to these plans are based on a percentage of associates' eligible annual compensation. The cost of these plans was $57.9 million in 2000, $53.7 million in 1999 and $52.5 million in 1998. The liability for the nonqualified plan at February 3, 2001 and January 29, 2000 amounted to $107.0 million and $87.1 million and is included in other long-term liabilities.

11. Derivatives, Fair Value of Financial Instruments and Concentration of Credit Risk

The Company uses forward contracts on a limited basis, in order to reduce market risk exposure associated with fluctuations in foreign currency rates on a small volume of its merchandise purchases. These financial instruments are designated at inception as hedges, and are monitored to determine their effectiveness as hedges. The Company does not hold or issue financial instruments for trading purposes.

At January 29, 2000, the Company had an interest rate swap that effectively changed the Company's interest rate exposure on $100 million of variable rate debt to a fixed rate of 8.09% through July 2000. There were no interest rate swaps outstanding at February 3, 2001.

Fair Value

The carrying value of cash equivalents, accounts receivable, accounts payable, current portion of long-term debt, and accrued expenses approximates fair value because of their short maturity. The fair value of long-term debt is estimated based on the quoted market prices for the same or similar issues or on the current rates offered to the Company for debt of the same remaining maturities. The estimated fair value of the Company's long-term debt at February 3, 2001 and January 29, 2000 was $396.4 million and $371.8 million compared to the carrying value of $400.0 million in 2000 and 1999.

Concentration of Credit Risk

The Company is subject to concentration of credit risk relating to cash and equivalents. The Company maintains cash and equivalents with various major financial institutions, as well as corporate commercial paper. The Company monitors the relative credit standing of these financial institutions and other entities and limits the amount of credit exposure with any one entity. The Company also monitors the creditworthiness of the entities to which it grants credit terms in the normal course of business.

12. Segment Information

The Company identifies operating segments based on a business's operating characteristics. Reportable segments were determined based on similar economic characteristics, the nature of products and services and the method of distribution. The apparel segment derives its revenues from sales of women's and men's apparel. The Intimate Brands segment derives its revenues from sales of women's intimate and other apparel, and personal care products and accessories. Sales outside the United States were not significant.

The Company and IBI have entered into intercompany agreements for services that include merchandise purchases, capital expenditures, real estate management and leasing, inbound and outbound transportation and corporate services. These agreements specify that identifiable costs be passed through to IBI and that other service-related costs be allocated based on various methods. Costs are passed through and allocated to the apparel businesses in a similar manner. Management believes that the methods of allocation are reasonable.

As a result of its spin-off, the operating results of TOO are included in the "Other" category for all periods presented. The operating results of Galyan's (which were consolidated through August 31, 1999 and accounted for using the equity method thereafter) are also included in the "Other" category.

Stock Options Outstanding at February 3, 2001

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$7–$10	8,649,000	5.8	$9	3,889,000	$9
$11–$15	10,732,000	6.3	$12	4,232,000	$12
$16–$20	8,990,000	8.4	$16	2,193,000	$16
$21–$27	1,836,000	9.0	$22	160,000	$22
$7–$27	30,207,000	6.9	$13	10,474,000	$12

Stock Option Activity	Number of Shares	Weighted Average Option Price Per Share
1998		
Outstanding at beginning of year	28,140,000	$9.85
Granted	7,770,000	13.16
Exercised	(4,878,000)	9.31
Canceled	(1,186,000)	12.13
Outstanding at end of year	29,846,000	$10.71
Options exercisable at end of year	8,908,000	$9.79
1999		
Outstanding at beginning of year	29,846,000	$10.71
Granted	10,014,000	17.31
Exercised	(5,348,000)	9.20
Canceled	(1,938,000)	11.95
Outstanding at end of year	32,574,000	$12.03
Options exercisable at end of year	8,114,000	$9.68
2000		
Outstanding at beginning of year	32,574,000	$12.03
Granted	4,075,000	17.39
Exercised	(4,157,000)	10.22
Canceled	(2,285,000)	14.03
Outstanding at end of year	30,207,000	$12.86
Options exercisable at end of year	10,474,000	$11.53

16 (Thousands)

Segment Information	Apparel Businesses	Intimate Brands	● Other	Reconciling Items	Total
2000					
Net sales	$4,948,829	$5,117,199	$38,578	–	$10,104,606
Intersegment sales	628,766	–	–	♦ $(628,766)	–
Depreciation and amortization	99,109	122,172	49,865	–	271,146
Operating income (loss)	123,477	754,356	(1,817)	**(9,900)	866,116
Total assets	1,160,758	1,457,348	1,356,953	■ 113,063	4,088,122
Capital expenditures	115,879	245,127	85,170	–	446,176
1999					
Net sales	$4,708,681	$4,632,029	$425,510	–	$9,766,220
Intersegment sales	570,659	–	–	♦ $(570,659)	–
Depreciation and amortization	107,810	104,625	60,008	–	272,443
Operating income (loss)	131,728	793,516	(17,936)	✚ 23,501	930,809
Total assets	1,106,072	1,384,432	1,611,922	■ 23,741	4,126,167
Capital expenditures	118,710	205,516	51,179	–	375,405
1998					
Net sales	$4,588,887	$3,988,594	$787,269	–	$9,364,750
Intersegment sales	457,204	–	–	♦ $(457,204)	–
Depreciation and amortization	126,438	101,221	58,341	–	286,000
Operating income (loss)	(45,353)	670,849	58,197	★ 1,740,030	2,423,723
Total assets	1,186,243	1,448,077	1,909,528	■ 5,860	4,549,708
Capital expenditures	68,695	121,543	157,118	–	347,356

● Included in the "Other" category are Henri Bendel, Galyan's (through August 31, 1999), TOO (through August 23, 1999), A&F (through May 19, 1998), non-core real estate, equity investments and corporate. None of the businesses included in "Other" are significant operating segments.

♦ Represents intersegment sales elimination.

■ Represents intersegment receivable/payable elimination.

Special and nonrecurring items—

** 2000: a $9.9 million charge for Intimate Brands to close Bath & Body Works' nine stores in the United Kingdom.

✚ 1999: 1) a $13.1 million charge for transaction costs related to the TOO spin-off; and 2) the reversal of a $36.6 million liability related to downsizing costs for Henri Bendel. These special items relate to the "Other" category.

★ 1998: 1) a $1.651 billion tax-free gain on the split-off of A&F; 2) a $93.7 million gain from the sale of the Company's remaining interest in Brylane; and 3) a $5.1 million charge for severance and other associate termination costs related to the closing of Henri Bendel stores. These special items relate to the "Other" category.

13. Quarterly Financial Data (Unaudited)

Summarized quarterly financial results for 2000 and 1999 follow (thousands except per share amounts):

2000 Quarters ●	First	Second	Third	Fourth
Net sales	$2,124,986	$2,289,317	$2,168,375	$3,521,928
Gross income	698,047	742,418	719,555	1,277,197
Net income	62,950	77,573	49,231	238,151
Net income per share:				
Basic	$0.15	$0.18	$0.12	$0.56
Diluted	0.14	0.17	0.11	0.54
1999 Quarters ●				
Net sales	$2,117,068	$2,289,250	$2,064,068	$3,295,834
Gross income	647,036	727,930	656,992	1,291,199
Net income	45,451	57,482	41,362	316,464
Net income per share:				
Basic	$0.10	$0.13	$0.10	$0.74
Diluted	0.10	0.12	0.09	0.70

● Net sales and gross income for 1999 and the first three quarters of 2000 reflect the reclassification of shipping and handling revenues and costs and associate discounts (see Note 1).

2000: Special and nonrecurring items included a $9.9 million charge in the fourth quarter to close Bath & Body Works' nine stores in the United Kingdom.

1999: Special and nonrecurring items included a $13.1 million charge in the second quarter for transaction costs related to the TOO spin-off and the reversal of a $36.6 million liability in the fourth quarter related to downsizing costs for Henri Bendel.

MARKET PRICE AND DIVIDEND INFORMATION

The Company's common stock is traded on the New York Stock Exchange ("LTD") and the London Stock Exchange. On February 3, 2001, there were approximately 77,000 shareholders of record. However, when including active associates who participate in the Company's stock purchase plan, associates who own shares through Company-sponsored retirement plans and others holding shares in broker accounts under street names, the Company estimates the shareholder base to be approximately 190,000.

	Market Price		Cash Dividend
Fiscal Year 2000	High	Low	Per Share
4th quarter	$27.78	$14.44	$0.075
3rd quarter	24.92	18.18	0.075
2nd quarter	25.58	20.79	0.075
1st quarter	25.61	14.23	0.075
Fiscal Year 1999			
4th quarter	$21.91	$15.25	$0.075
3rd quarter	● 22.97	18.22	0.075
2nd quarter	25.06	22.09	0.075
1st quarter	22.00	17.13	0.075

● Limited Too was spun off to The Limited shareholders in the form of a dividend valued at approximately $1.18 per share on the date of the spin-off (August 23, 1999).

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and
Shareholders of The Limited, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, shareholders' equity and cash flows present fairly, in all material respects, the financial position of The Limited, Inc. and its subsidiaries at February 3, 2001 and January 29, 2000, and the results of their operations and their cash flows for each of the three years in the period ended February 3, 2001 (on pages 11–16) in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes 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. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP
Columbus, Ohio
March 1, 2001

EXECUTIVE OFFICERS

Leslie H. Wexner
Chairman and Chief Executive Officer

V. Ann Hailey
Executive Vice President and Chief Financial Officer

Leonard A. Schlesinger
Executive Vice President and Chief Operating Officer

BUSINESS UNIT LEADERS

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Chief Executive Officer
The Limited

Robin Burns, President and
Chief Executive Officer
Intimate Beauty Corporation

Ed Burstell, Vice President and
General Manager
Henri Bendel

Richard P. Crystal, President and
Chief Executive Officer
Lerner New York

Jill Brown Dean, President
Lane Bryant

Kenneth B. Gilman, Chief Executive Officer
Lane Bryant

Grace A. Nichols, President and
Chief Executive Officer
Victoria's Secret Stores

Beth M. Pritchard, President and
Chief Executive Officer
Bath & Body Works

Martin Trust, President and
Chief Executive Officer
Mast Industries

Sharen J. Turney, President and
Chief Executive Officer
Victoria's Secret Direct

Michael A. Weiss, President and
Chief Executive Officer
Express and Express Men's

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Design Services

Barry D. Kaufman, President
Property Services

Nicholas LaHowchic, President
Logistics Services

Edward G. Razek, Chief Marketing Officer and
President
Brand and Creative Services

Jon J. Ricker, Chief Information Officer and
President
Technology Services

Gene Torchia, President
Store Design and Construction

Stuart Burgdoerfer, Vice President
Controller

Timothy J. Faber, Vice President
Treasury, Mergers and Acquisitions

Daniel P. Finkelman, Senior Vice President
Brand and Business Planning

Samuel P. Fried, Senior Vice President
General Counsel and Secretary

Peter L. Gartman, Senior Vice President
Chief Sourcing Officer

Bethmara Kessler, Vice President
Internal Audit

Timothy B. Lyons, Senior Vice President
Taxes

Bruce A. Soll, Senior Vice President and Counsel
Company Affairs

BOARD OF DIRECTORS

Leslie H. Wexner
Chairman and Chief Executive Officer ✚

V. Ann Hailey
Executive Vice President and Chief Financial Officer

Leonard A. Schlesinger
Executive Vice President and Chief Operating Officer

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President, Mast Industries, Inc.
Andover, Massachusetts

Eugene M. Freedman
Senior Advisor and Director,
Monitor Clipper Partners, Inc. ■
Cambridge, Massachusetts

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Chancellor, Vanderbilt University ●
Nashville, Tennessee

David T. Kollat
Chairman, 22, Inc.
Westerville, Ohio

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Chairman of the Board,
Fifth Third Bank, Central Ohio ◆ ● ■
Columbus, Ohio

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Managing Partner, Squire, Sanders & Dempsey, LLP ◆
Columbus, Ohio

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Chairman and Chief Executive Officer,
J. Net Enterprises, Inc. ◆ ■ ✚
New York, New York

Abigail S. Wexner
Attorney at Law ■
Columbus, Ohio

Bella Wexner
Director Emeritus

Raymond Zimmerman
Chairman of the Board,
99¢ Stuff.com ◆ ■
Boca Raton, Florida

◆ = Member of the Audit Committee
● = Member of the Compensation Committee
■ = Member of the Finance Committee
✚ = Member of the Nominating Committee

COMPANY INFORMATION

Headquarters
The Limited, Inc.
Three Limited Parkway
Columbus, Ohio 43230
614.415.7000
www.Limited.com

Annual Meeting
The Annual Meeting of Shareholders is scheduled for:
9:00 A.M., Monday, May 21, 2001
Three Limited Parkway
Columbus, Ohio 43230

Stock Exchange Listings
New York Stock Exchange (Trading Symbol "LTD")
London Stock Exchange
Commonly listed in newspapers as "Limitd"

Independent Public Accountants
PricewaterhouseCoopers LLP
Columbus, Ohio

Overseas Offices
Antananarivo, Cairo, Guatemala City, Hong Kong, Jakarta, London, Mexico City, Milan, Port Louis, Porto, Seoul, Shanghai, Taipei, Tokyo

10-K Report and Information Requests
A copy of form 10-K is available without charge through our Web site, www.Limited.com, or upon written request to: The Limited, Inc., P.O. Box 28963, Columbus, Ohio 43228. For information please call 614.415.6400.

Stock Transfer Agent, Registrar, and Dividend Agent
First Chicago Trust Company of New York, a division of EquiServe
P.O. Box 2500, Jersey City, New Jersey 07303-2500
800.317.4445
www.EquiServe.com

The Limited, Inc.
Founded 1963
As of February 3, 2001:
Number of associates—123,700
Approximate shareholder base—190,000
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ANTICIPATED MONTHLY SALES AND QUARTERLY EARNINGS DATES FOR 2001:

February Sales	3/8/01
March Sales	4/12/01
April Sales	5/10/01
May Sales	6/7/01
June Sales	7/12/01
July Sales	8/9/01
August Sales	9/6/01
September Sales	10/11/01
October Sales	11/8/01
November Sales	12/6/01
December Sales	1/10/02
January Sales	2/7/02
1st Quarter Earnings	5/21/01
2nd Quarter Earnings	8/23/01
3rd Quarter Earnings	11/20/01
4th Quarter Earnings	2/28/02

Live audio of the quarterly earnings conference calls can be accessed through our Web site, www.Limited.com.

Audio replays of both monthly sales and quarterly earnings conference calls can be accessed through our Web site, www.Limited.com, or by dialing 800.337.6551 followed by the conference call passcode, LTD (or 583).

Appendix
Compound Interest and Annuity Tables

Table A.1

Future Value of $1 at Compounding Interest: 1%-20% $FV = (1+i)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.01000	1.02000	1.03000	1.04000	1.05000	1.06000	1.07000	1.08000	1.09000	1.10000
2	1.02010	1.04040	1.06090	1.08160	1.10250	1.12360	1.14490	1.16640	1.18810	1.21000
3	1.03030	1.06121	1.09273	1.12486	1.15762	1.19102	1.22504	1.25971	1.29503	1.33100
4	1.04060	1.08243	1.12551	1.16986	1.21551	1.26248	1.31080	1.36049	1.41158	1.46410
5	1.05101	1.10408	1.15927	1.21665	1.27628	1.33823	1.40255	1.46933	1.53862	1.61051
6	1.06152	1.12616	1.19405	1.26532	1.34010	1.41852	1.50073	1.58687	1.67710	1.77156
7	1.07214	1.14869	1.22987	1.31593	1.40710	1.50363	1.60578	1.71382	1.82804	1.94872
8	1.08286	1.17166	1.26677	1.36857	1.47746	1.59385	1.71819	1.85093	1.99256	2.14359
9	1.09369	1.19509	1.30477	1.42331	1.55133	1.68948	1.83846	1.99900	2.17189	2.35795
10	1.10462	1.21899	1.34392	1.48024	1.62889	1.79085	1.96715	2.15892	2.36736	2.59374
11	1.11567	1.24337	1.38423	1.53945	1.71034	1.89830	2.10485	2.33164	2.58043	2.85312
12	1.12683	1.26824	1.42576	1.60103	1.79586	2.01220	2.25219	2.51817	2.81266	3.13843
13	1.13809	1.29361	1.46853	1.66507	1.88565	2.13293	2.40985	2.71962	3.06580	3.45227
14	1.14947	1.31948	1.51259	1.73168	1.97993	2.26090	2.57853	2.93719	3.34173	3.79750
15	1.16097	1.34587	1.55797	1.80094	2.07893	2.39656	2.75903	3.17217	3.64248	4.17725
16	1.17258	1.37279	1.60471	1.87298	2.18287	2.54035	2.95216	3.42594	3.97031	4.59497
17	1.18430	1.40024	1.65285	1.94790	2.29202	2.69277	3.15882	3.70002	4.32763	5.05447
18	1.19615	1.42825	1.70243	2.02582	2.40662	2.85434	3.37993	3.99602	4.71712	5.55992
19	1.20811	1.45681	1.75351	2.10685	2.52695	3.02560	3.61653	4.31570	5.14166	6.11591
20	1.22019	1.48595	1.80611	2.19112	2.65330	3.20714	3.86968	4.66096	5.60441	6.72750
21	1.23239	1.51567	1.86029	2.27877	2.78596	3.39956	4.14056	5.03383	6.10881	7.40025
22	1.24472	1.54598	1.91610	2.36992	2.92526	3.60354	4.43040	5.43654	6.65860	8.14027
23	1.25716	1.57690	1.97359	2.46472	3.07152	3.81975	4.74053	5.87146	7.25787	8.95430
24	1.26973	1.60844	2.03279	2.56330	3.22510	4.04893	5.07237	6.34118	7.91108	9.84973
25	1.28243	1.64061	2.09378	2.66584	3.38635	4.29187	5.42743	6.84848	8.62308	10.83471
26	1.29526	1.67342	2.15659	2.77247	3.55567	4.54938	5.80735	7.39635	9.39916	11.91818
27	1.30821	1.70689	2.22129	2.88337	3.73346	4.82235	6.21387	7.98806	10.24508	13.10999
28	1.32129	1.74102	2.28793	2.99870	3.92013	5.11169	6.64884	8.62711	11.16714	14.42099
29	1.33450	1.77584	2.35657	3.11865	4.11614	5.41839	7.11426	9.31727	12.17218	15.86309
30	1.34785	1.81136	2.42726	3.24340	4.32194	5.74349	7.61226	10.06266	13.26768	17.44940

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.11000	1.12000	1.13000	1.14000	1.15000	1.16000	1.17000	1.18000	1.19000	1.20000
2	1.23210	1.25440	1.27690	1.29960	1.32250	1.34560	1.36890	1.39240	1.41610	1.44000
3	1.36763	1.40493	1.44290	1.48154	1.52088	1.56090	1.60161	1.64303	1.68516	1.72800
4	1.51807	1.57352	1.63047	1.68896	1.74901	1.81064	1.87389	1.93878	2.00534	2.07360
5	1.68506	1.76234	1.84244	1.92541	2.01136	2.10034	2.19245	2.28776	2.38635	2.48832
6	1.87041	1.97382	2.08195	2.19497	2.31306	2.43640	2.56516	2.69955	2.83976	2.98598
7	2.07616	2.21068	2.35261	2.50227	2.66002	2.82622	3.00124	3.18547	3.37932	3.58318
8	2.30454	2.47596	2.65844	2.85259	3.05902	3.27841	3.51145	3.75886	4.02139	4.29982
9	2.55804	2.77308	3.00404	3.25195	3.51788	3.80296	4.10840	4.43545	4.78545	5.15978
10	2.83942	3.10585	3.39457	3.70722	4.04556	4.41144	4.80683	5.23384	5.69468	6.19174
11	3.15176	3.47855	3.83586	4.22623	4.65239	5.11726	5.62399	6.17593	6.77667	7.43008
12	3.49845	3.89598	4.33452	4.81790	5.35025	5.93603	6.58007	7.28759	8.06424	8.91610
13	3.88328	4.36349	4.89801	5.49241	6.15279	6.88579	7.69868	8.59936	9.59645	10.69932
14	4.31044	4.88711	5.53475	6.26135	7.07571	7.98752	9.00745	10.14724	11.41977	12.83918
15	4.78459	5.47357	6.25427	7.13794	8.13706	9.26552	10.53872	11.97375	13.58953	15.40702
16	5.31089	6.13039	7.06733	8.13725	9.35762	10.74800	12.33030	14.12902	16.17154	18.48843
17	5.89509	6.86604	7.98608	9.27646	10.76126	12.46768	14.42646	16.67225	19.24413	22.18611
18	6.54355	7.68997	9.02427	10.57517	12.37545	14.46251	16.87895	19.67325	22.90052	26.62333
19	7.26334	8.61276	10.19742	12.05569	14.23177	16.77652	19.74838	23.21444	27.25162	31.94800
20	8.06231	9.64629	11.52309	13.74349	16.36654	19.46076	23.10560	27.39303	32.42942	38.33760
21	8.94917	10.80385	13.02109	15.66758	18.82152	22.57448	27.03355	32.32378	38.59101	46.00512
22	9.93357	12.10031	14.71383	17.86104	21.64475	26.18640	31.62925	38.14206	45.92331	55.20614
23	11.02627	13.55235	16.62663	20.36158	24.89146	30.37622	37.00623	45.00763	54.64873	66.24737
24	12.23916	15.17863	18.78809	23.21221	28.62518	35.23642	43.29729	53.10901	65.03199	79.49685
25	13.58546	17.00006	21.23054	26.46192	32.91895	40.87424	50.65783	62.66863	77.38807	95.39622
26	15.07986	19.04007	23.99051	30.16658	37.85680	47.41412	59.26966	73.94898	92.09181	114.47546
27	16.73865	21.32488	27.10928	34.38991	43.53531	55.00038	69.34550	87.25980	109.58925	137.37055
28	18.57990	23.88387	30.63349	39.20449	50.06561	63.80044	81.13423	102.96656	130.41121	164.84466
29	20.62369	26.74993	34.61584	44.69312	57.57545	74.00851	94.92705	121.50054	155.18934	197.81359
30	22.89230	29.95992	39.11590	50.95016	66.21177	85.84988	111.06465	143.37064	184.67531	237.37631

Table A.2

Future Value of an Ordinary Annuity of $1 per Period: 1%-20%

$$FV_A = \frac{(1+i)^n - 1}{i}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
2	2.01000	2.02000	2.03000	2.04000	2.05000	2.06000	2.07000	2.08000	2.09000	2.10000
3	3.03010	3.06040	3.09090	3.12160	3.15250	3.18360	3.21490	3.24640	3.27810	3.31000
4	4.06040	4.12161	4.18363	4.24646	4.31012	4.37462	4.43994	4.50611	4.57313	4.64100
5	5.10101	5.20404	5.30914	5.41632	5.52563	5.63709	5.75074	5.86660	5.98471	6.10510
6	6.15202	6.30812	6.46841	6.63298	6.80191	6.97532	7.15329	7.33593	7.52333	7.71561
7	7.21354	7.43428	7.66246	7.89829	8.14201	8.39384	8.65402	8.92280	9.20043	9.48717
8	8.28567	8.58297	8.89234	9.21423	9.54911	9.89747	10.25980	10.63663	11.02847	11.43589
9	9.36853	9.75463	10.15911	10.58280	11.02656	11.49132	11.97799	12.48756	13.02104	13.57948
10	10.46221	10.94972	11.46388	12.00611	12.57789	13.18079	13.81645	14.48656	15.19293	15.93742
11	11.56683	12.16872	12.80780	13.48635	14.20679	14.97164	15.78360	16.64549	17.56029	18.53117
12	12.68250	13.41209	14.19203	15.02581	15.91713	16.86994	17.88845	18.97713	20.14072	21.38428
13	13.80933	14.68033	15.61779	16.62684	17.71298	18.88214	20.14064	21.49530	22.95338	24.52271
14	14.94742	15.97394	17.08632	18.29191	19.59863	21.01507	22.55049	24.21492	26.01919	27.97498
15	16.09690	17.29342	18.59891	20.02359	21.57856	23.27597	25.12902	27.15211	29.36092	31.77248
16	17.25786	18.63929	20.15688	21.82453	23.65749	25.67253	27.88805	30.32428	33.00340	35.94973
17	18.43044	20.01207	21.76159	23.69751	25.84037	28.21288	30.84022	33.75023	36.97370	40.54470
18	19.61475	21.41231	23.41444	25.64541	28.13238	30.90565	33.99903	37.45024	41.30134	45.59917
19	20.81090	22.84056	25.11687	27.67123	30.53900	33.75999	37.37896	41.44626	46.01846	51.15909
20	22.01900	24.29737	26.87037	29.77808	33.06595	36.78559	40.99549	45.76196	51.16012	57.27500
21	23.23919	25.78332	28.67649	31.96920	35.71925	39.99273	44.86518	50.42292	56.76453	64.00250
22	24.47159	27.29898	30.53678	34.24797	38.50521	43.39229	49.00574	55.45676	62.87334	71.40275
23	25.71630	28.84496	32.45288	36.61789	41.43048	46.99583	53.43614	60.89330	69.53194	79.54302
24	26.97346	30.42186	34.42647	39.08260	44.50200	50.81558	58.17667	66.76476	76.78981	88.49733
25	28.24320	32.03030	36.45926	41.64591	47.72710	54.86451	63.24904	73.10594	84.70090	98.34706
26	29.52563	33.67091	38.55304	44.31174	51.11345	59.15638	68.67647	79.95442	93.32398	109.18177
27	30.82089	35.34432	40.70963	47.08421	54.66913	63.70577	74.48382	87.35077	102.72313	121.09994
28	32.12910	37.05121	42.93092	49.96758	58.40258	68.52811	80.69769	95.33883	112.96822	134.20994
29	33.45039	38.79223	45.21885	52.96629	62.32271	73.63980	87.34653	103.96594	124.13536	148.63093
30	34.78489	40.56808	47.57542	56.08494	66.43885	79.05819	94.46079	113.28321	136.30754	164.49402

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
2	2.11000	2.12000	2.13000	2.14000	2.15000	2.16000	2.17000	2.18000	2.19000	2.20000
3	3.34210	3.37440	3.40690	3.43960	3.47250	3.50560	3.53890	3.57240	3.60610	3.64000
4	4.70973	4.77933	4.84980	4.92114	4.99337	5.06650	5.14051	5.21543	5.29126	5.36800
5	6.22780	6.35285	6.48027	6.61010	6.74238	6.87714	7.01440	7.15421	7.29660	7.44160
6	7.91286	8.11519	8.32271	8.53552	8.75374	8.97748	9.20685	9.44197	9.68295	9.92992
7	9.78327	10.08901	10.40466	10.73049	11.06680	11.41387	11.77201	12.14152	12.52271	12.91590
8	11.85943	12.29969	12.75726	13.23276	13.72682	14.24009	14.77325	15.32700	15.90203	16.49908
9	14.16397	14.77566	15.41571	16.08535	16.78584	17.51851	18.28471	19.08585	19.92341	20.79890
10	16.72201	17.54874	18.41975	19.33730	20.30372	21.32147	22.39311	23.52131	24.70886	25.95868
11	19.56143	20.65458	21.81432	23.04452	24.34928	25.73290	27.19994	28.75514	30.40355	32.15042
12	22.71319	24.13313	25.65018	27.27075	29.00167	30.85017	32.82393	34.93107	37.18022	39.58050
13	26.21164	28.02911	29.98470	32.08865	34.35192	36.78620	39.40399	42.21866	45.24446	48.49660
14	30.09492	32.39260	34.88271	37.58107	40.50471	43.67199	47.10267	50.81802	54.84091	59.19592
15	34.40536	37.27971	40.41746	43.84241	47.58041	51.65951	56.11013	60.96527	66.26068	72.03511
16	39.18995	42.75328	46.67173	50.98035	55.71747	60.92503	66.64885	72.93901	79.85021	87.44213
17	44.50084	48.88367	53.73906	59.11760	65.07509	71.67303	78.97915	87.06804	96.02175	105.93056
18	50.39594	55.74971	61.72514	68.39407	75.83636	84.14072	93.40561	103.74028	115.26588	128.11667
19	56.93949	63.43968	70.74941	78.96923	88.21181	98.60323	110.28456	123.41353	138.16640	154.74000
20	64.20283	72.05244	80.94683	91.02493	102.44358	115.37975	130.03294	146.62797	165.41802	186.68800
21	72.26514	81.69874	92.46992	104.76842	118.81012	134.84051	153.13854	174.02100	197.84744	225.02560
22	81.21431	92.50258	105.49101	120.43600	137.63164	157.41499	180.17209	206.34479	236.43846	271.03072
23	91.14788	104.60289	120.20484	138.29704	159.27638	183.60138	211.80134	244.48685	282.36176	326.23686
24	102.17415	118.15524	136.83147	158.65862	184.16784	213.97761	248.80757	289.49448	337.01050	392.48424
25	114.41331	133.33387	155.61956	181.87083	212.79302	249.21402	292.10486	342.60349	402.04249	471.98108
26	127.99877	150.33393	176.85010	208.33274	245.71197	290.08827	342.76268	405.27211	479.43056	567.37730
27	143.07864	169.37401	200.84061	238.49933	283.56877	337.50239	402.03234	479.22109	571.52237	681.85276
28	159.81729	190.69889	227.94989	272.88923	327.10408	392.50277	471.37783	566.48089	681.11162	819.22331
29	178.39719	214.58275	258.58338	312.09373	377.16969	456.30322	552.51207	669.44745	811.52283	984.06797
30	199.02088	241.33268	293.19922	356.78685	434.74515	530.31173	647.43912	790.94799	966.71217	1181.88157

Table A.3

Present Value of $1 at Compounding Interest: 1%-20%

$$PV = \frac{1}{(1+i)^n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.99010	0.98039	0.97087	0.96154	0.95238	0.94340	0.93458	0.92593	0.91743	0.90909
2	0.98030	0.96117	0.94260	0.92456	0.90703	0.89000	0.87344	0.85734	0.84168	0.82645
3	0.97059	0.94232	0.91514	0.88900	0.86384	0.83962	0.81630	0.79383	0.77218	0.75131
4	0.96098	0.92385	0.88849	0.85480	0.82270	0.79209	0.76290	0.73503	0.70843	0.68301
5	0.95147	0.90573	0.86261	0.82193	0.78353	0.74726	0.71299	0.68058	0.64993	0.62092
6	0.94205	0.88797	0.83748	0.79031	0.74622	0.70496	0.66634	0.63017	0.59627	0.56447
7	0.93272	0.87056	0.81309	0.75992	0.71068	0.66506	0.62275	0.58349	0.54703	0.51316
8	0.92348	0.85349	0.78941	0.73069	0.67684	0.62741	0.58201	0.54027	0.50187	0.46651
9	0.91434	0.83676	0.76642	0.70259	0.64461	0.59190	0.54393	0.50025	0.46043	0.42410
10	0.90529	0.82035	0.74409	0.67556	0.61391	0.55839	0.50835	0.46319	0.42241	0.38554
11	0.89632	0.80426	0.72242	0.64958	0.58468	0.52679	0.47509	0.42888	0.38753	0.35049
12	0.88745	0.78849	0.70138	0.62460	0.55684	0.49697	0.44401	0.39711	0.35553	0.31863
13	0.87866	0.77303	0.68095	0.60057	0.53032	0.46884	0.41496	0.36770	0.32618	0.28966
14	0.86996	0.75788	0.66112	0.57748	0.50507	0.44230	0.38782	0.34046	0.29925	0.26333
15	0.86135	0.74301	0.64186	0.55526	0.48102	0.41727	0.36245	0.31524	0.27454	0.23939
16	0.85282	0.72845	0.62317	0.53391	0.45811	0.39365	0.33873	0.29189	0.25187	0.21763
17	0.84438	0.71416	0.60502	0.51337	0.43630	0.37136	0.31657	0.27027	0.23107	0.19784
18	0.83602	0.70016	0.58739	0.49363	0.41552	0.35034	0.29586	0.25025	0.21199	0.17986
19	0.82774	0.68643	0.57029	0.47464	0.39573	0.33051	0.27651	0.23171	0.19449	0.16351
20	0.81954	0.67297	0.55368	0.45639	0.37689	0.31180	0.25842	0.21455	0.17843	0.14864
21	0.81143	0.65978	0.53755	0.43883	0.35894	0.29416	0.24151	0.19866	0.16370	0.13513
22	0.80340	0.64684	0.52189	0.42196	0.34185	0.27751	0.22571	0.18394	0.15018	0.12285
23	0.79544	0.63416	0.50669	0.40573	0.32557	0.26180	0.21095	0.17032	0.13778	0.11168
24	0.78757	0.62172	0.49193	0.39012	0.31007	0.24698	0.19715	0.15770	0.12640	0.10153
25	0.77977	0.60953	0.47761	0.37512	0.29530	0.23300	0.18425	0.14602	0.11597	0.09230
26	0.77205	0.59758	0.46369	0.36069	0.28124	0.21981	0.17220	0.13520	0.10639	0.08391
27	0.76440	0.58586	0.45019	0.34682	0.26785	0.20737	0.16093	0.12519	0.09761	0.07628
28	0.75684	0.57437	0.43708	0.33348	0.25509	0.19563	0.15040	0.11591	0.08955	0.06934
29	0.74934	0.56311	0.42435	0.32065	0.24295	0.18456	0.14056	0.10733	0.08215	0.06304
30	0.74192	0.55207	0.41199	0.30832	0.23138	0.17411	0.13137	0.09938	0.07537	0.05731
31	0.73458	0.54125	0.39999	0.29646	0.22036	0.16425	0.12277	0.09202	0.06915	0.05210
32	0.72730	0.53063	0.38834	0.28506	0.20987	0.15496	0.11474	0.08520	0.06344	0.04736
33	0.72010	0.52023	0.37703	0.27409	0.19987	0.14619	0.10723	0.07889	0.05820	0.04306
34	0.71297	0.51003	0.36604	0.26355	0.19035	0.13791	0.10022	0.07305	0.05339	0.03914
35	0.70591	0.50003	0.35538	0.25342	0.18129	0.13011	0.09366	0.06763	0.04899	0.03558
36	0.69892	0.49022	0.34503	0.24367	0.17266	0.12274	0.08754	0.06262	0.04494	0.03235
37	0.69200	0.48061	0.33498	0.23430	0.16444	0.11579	0.08181	0.05799	0.04123	0.02941
38	0.68515	0.47119	0.32523	0.22529	0.15661	0.10924	0.07646	0.05369	0.03783	0.02673
39	0.67837	0.46195	0.31575	0.21662	0.14915	0.10306	0.07146	0.04971	0.03470	0.02430
40	0.67165	0.45289	0.30656	0.20829	0.14205	0.09722	0.06678	0.04603	0.03184	0.02209

Table A.3 (cont.)

Present Value of $1 at Compounding Interest: 1%-20% (continued)

Period	*11%*	*12%*	*13%*	*14%*	*15%*	*16%*	*17%*	*18%*	*19%*	*20%*
1	0.90090	0.89286	0.88496	0.87719	0.86957	0.86207	0.85470	0.84746	0.84034	0.83333
2	0.81162	0.79719	0.78315	0.76947	0.75614	0.74316	0.73051	0.71818	0.70616	0.69444
3	0.73119	0.71178	0.69305	0.67497	0.65752	0.64066	0.62437	0.60863	0.59342	0.57870
4	0.65873	0.63553	0.61332	0.59208	0.57175	0.55229	0.53365	0.51579	0.49867	0.48225
5	0.59345	0.56743	0.54276	0.51937	0.49718	0.47611	0.45611	0.43711	0.41905	0.40188
6	0.53464	0.50663	0.48032	0.45559	0.43233	0.41044	0.38984	0.37043	0.35214	0.33490
7	0.48166	0.45235	0.42506	0.39964	0.37594	0.35383	0.33320	0.31393	0.29592	0.27908
8	0.43393	0.40388	0.37616	0.35056	0.32690	0.30503	0.28478	0.26604	0.24867	0.23257
9	0.39092	0.36061	0.33288	0.30751	0.28426	0.26295	0.24340	0.22546	0.20897	0.19381
10	0.35218	0.32197	0.29459	0.26974	0.24718	0.22668	0.20804	0.19106	0.17560	0.16151
11	0.31728	0.28748	0.26070	0.23662	0.21494	0.19542	0.17781	0.16192	0.14757	0.13459
12	0.28584	0.25668	0.23071	0.20756	0.18691	0.16846	0.15197	0.13722	0.12400	0.11216
13	0.25751	0.22917	0.20416	0.18207	0.16253	0.14523	0.12989	0.11629	0.10421	0.09346
14	0.23199	0.20462	0.18068	0.15971	0.14133	0.12520	0.11102	0.09855	0.08757	0.07789
15	0.20900	0.18270	0.15989	0.14010	0.12289	0.10793	0.09489	0.08352	0.07359	0.06491
16	0.18829	0.16312	0.14150	0.12289	0.10686	0.09304	0.08110	0.07078	0.06184	0.05409
17	0.16963	0.14564	0.12522	0.10780	0.09293	0.08021	0.06932	0.05998	0.05196	0.04507
18	0.15282	0.13004	0.11081	0.09456	0.04081	0.06914	0.05925	0.05083	0.04367	0.03756
19	0.13768	0.11611	0.09806	0.08295	0.07027	0.05961	0.05064	0.04308	0.03670	0.03130
20	0.12403	0.10367	0.08678	0.07276	0.06110	0.05139	0.04328	0.03651	0.03084	0.02608
21	0.11174	0.09256	0.07680	0.06383	0.05313	0.04430	0.03699	0.03094	0.02591	0.02174
22	0.10067	0.08264	0.06796	0.05599	0.04620	0.03819	0.03162	0.02622	0.02178	0.01811
23	0.09069	0.07379	0.06014	0.04911	0.04017	0.03292	0.02702	0.02222	0.01830	0.01509
24	0.08170	0.06588	0.05323	0.04308	0.03493	0.02838	0.02310	0.01883	0.01538	0.01258
25	0.07361	0.05882	0.04710	0.03779	0.03038	0.02447	0.01974	0.01596	0.01292	0.01048
26	0.06631	0.05252	0.04168	0.03315	0.02642	0.02109	0.01687	0.01352	0.01086	0.00874
27	0.05974	0.04689	0.03689	0.02908	0.02297	0.01818	0.01442	0.01146	0.00912	0.00728
28	0.05382	0.04187	0.03264	0.02551	0.01997	0.01567	0.01233	0.00971	0.00767	0.00607
29	0.04849	0.03738	0.02889	0.02237	0.01737	0.01351	0.01053	0.00823	0.00644	0.00506
30	0.04368	0.03338	0.02557	0.01963	0.01510	0.01165	0.00900	0.00697	0.00541	0.00421
31	0.03935	0.02980	0.02262	0.01722	0.01313	0.01004	0.00770	0.00591	0.00455	0.00351
32	0.03545	0.02661	0.02002	0.01510	0.01142	0.00866	0.00658	0.00501	0.00382	0.00293
33	0.03194	0.02376	0.01772	0.01325	0.00993	0.00746	0.00562	0.00425	0.00321	0.00244
34	0.02878	0.02121	0.01568	0.01162	0.00864	0.00643	0.00480	0.00360	0.00270	0.00203
35	0.02592	0.01894	0.01388	0.01019	0.00751	0.00555	0.00411	0.00305	0.00227	0.00169
36	0.02335	0.01691	0.01228	0.00894	0.00653	0.00478	0.00351	0.00258	0.00191	0.00141
37	0.02104	0.01510	0.01087	0.00784	0.00568	0.00412	0.00300	0.00219	0.00160	0.00118
38	0.01896	0.01348	0.00962	0.00688	0.00494	0.00355	0.00256	0.00186	0.00135	0.00098
39	0.01708	0.01204	0.00851	0.00604	0.00429	0.00306	0.00219	0.00157	0.00113	0.00082
40	0.01538	0.01075	0.00753	0.00529	0.00373	0.00264	0.00187	0.00133	0.00095	0.00068

Table A.4

Present Value of an Ordinary Annuity of $1 per Period: 1%-20%

$$PV_A = \frac{1 - \frac{1}{(1+i)^n}}{i}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.99010	0.98039	0.97087	0.96154	0.95238	0.94340	0.93458	0.92593	0.91743	0.90909
2	1.97040	1.94156	1.91347	1.88609	1.85941	1.83339	1.80802	1.78326	1.75911	1.73554
3	2.94099	2.88388	2.82861	2.77509	2.72325	2.67301	2.62432	2.57710	2.53129	2.48685
4	3.90197	3.80773	3.71710	3.62990	3.54595	3.46511	3.38721	3.31213	3.23972	3.16987
5	4.85343	4.71346	4.57971	4.45182	4.32948	4.21236	4.10020	3.99271	3.88965	3.79079
6	5.79548	5.60143	5.41719	5.24214	5.07569	4.91732	4.76654	4.62288	4.48592	4.35526
7	6.72819	6.47199	6.23028	6.00205	5.78637	5.58238	5.38929	5.20637	5.03295	4.86842
8	7.65168	7.32548	7.01969	6.73274	6.46321	6.20979	5.97130	5.74664	5.53482	5.33493
9	8.56602	8.16224	7.78611	7.43533	7.10782	6.80169	6.51523	6.24689	5.99525	5.75902
10	9.47130	8.98259	8.53020	8.11090	7.72173	7.36009	7.02358	6.71008	6.41766	6.14457
11	10.36763	9.78685	9.25262	8.76048	8.30641	7.88687	7.49867	7.13896	6.80519	6.49506
12	11.25508	10.57534	9.95400	9.38507	8.86325	8.38384	7.94269	7.53608	7.16073	6.81369
13	12.13374	11.34837	10.63496	9.98565	9.39357	8.85268	8.35765	7.90378	7.48690	7.10336
14	13.00370	12.10625	11.29607	10.56312	9.89864	9.29498	8.74547	8.24424	7.78615	7.36669
15	13.86505	12.84926	11.93794	11.11839	10.37966	9.71225	9.10791	8.55948	8.06069	7.60608
16	14.71787	13.57771	12.56110	11.65230	10.83777	10.10590	9.44665	8.85137	8.31256	7.82371
17	15.56225	14.29187	13.16612	12.16567	11.27407	10.47726	9.76322	9.12164	8.54363	8.02155
18	16.39827	14.99203	13.75351	12.65930	11.68959	10.82760	10.05909	9.37189	8.75563	8.20141
19	17.22601	15.67846	14.32380	13.13394	12.08532	11.15812	10.33560	9.60360	8.95011	8.36492
20	18.04555	16.35143	14.87747	13.59033	12.46221	11.46992	10.59401	9.81815	9.12855	8.51356
21	18.85698	17.01121	15.41502	14.02916	12.82115	11.76408	10.83553	10.01680	9.29224	8.64869
22	19.66038	17.65805	15.93692	14.45112	13.16300	12.04158	11.06124	10.20074	9.44243	8.77154
23	20.45582	18.29220	16.44361	14.85684	13.48857	12.30338	11.27219	10.37106	9.58021	8.88322
24	21.24339	18.91393	16.93554	15.24696	13.79864	12.55036	11.46933	10.52876	9.70661	8.98474
25	22.02316	19.52346	17.41315	15.62208	14.09394	12.78336	11.65358	10.67478	9.82258	9.07704
26	22.79520	20.12104	17.87684	15.98277	14.37519	13.00317	11.82578	10.80998	9.92897	9.16095
27	23.55961	20.70690	18.32703	16.32959	14.64303	13.21053	11.98671	10.93516	10.02658	9.23722
28	24.31644	21.28127	18.76411	16.66306	14.89813	13.40616	12.13711	11.05108	10.11613	9.30657
29	25.06579	21.84438	19.18845	16.98371	15.14107	13.59072	12.27767	11.15841	10.19828	9.36961
30	25.80771	22.39646	19.60044	17.29203	15.37245	13.76483	12.40904	11.25778	10.27365	9.42691
31	26.54229	22.93770	20.00043	17.58849	15.59281	13.92909	12.53181	11.34980	10.34280	9.47901
32	27.26959	23.46833	20.38877	17.87355	15.80268	14.08404	12.64656	11.43500	10.40624	9.52638
33	27.98969	23.98856	20.76579	18.14765	16.00255	14.23023	12.75379	11.51389	10.46444	9.56943
34	28.70267	24.49589	21.13184	18.41120	16.19290	14.36814	12.85401	11.58693	10.51784	9.60857
35	29.40858	24.99862	21.48722	18.66461	16.37419	14.49825	12.94767	11.65457	10.56682	9.64416
36	30.10751	25.48884	21.83225	18.90828	16.54685	14.62099	13.03521	11.71719	10.61176	9.67651
37	30.79951	25.96945	22.16724	19.14258	16.71129	14.73678	13.11702	11.77518	10.65299	9.70592
38	31.48466	26.44064	22.49246	19.36786	16.86789	14.84602	13.19347	11.82887	10.69082	9.73265
39	32.16303	26.90259	22.80822	19.58448	17.01704	14.94907	13.26493	11.87858	10.72552	9.75696
40	32.83469	27.35548	23.11477	19.79277	17.15909	15.04630	13.33171	11.92461	10.75736	9.77905

Table A.4 (cont.)

Present Value of an Ordinary Annuity of $1 per Period: 1%-20% (continued)

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.90090	0.89286	0.88496	0.87719	0.86957	0.86207	0.85470	0.84746	0.84034	0.83333
2	1.71252	1.69005	1.66810	1.64666	1.62571	1.60523	1.58521	1.56564	1.54650	1.52778
3	2.44371	2.40183	2.36115	2.32163	2.28323	2.24589	2.20958	2.17427	2.13992	2.10648
4	3.10245	3.03735	2.97447	2.91371	2.85498	2.79818	2.74324	2.69006	2.63859	2.58873
5	3.69590	3.60478	3.51723	3.43308	3.35216	3.27429	3.19935	3.12717	3.05763	2.99061
6	4.23054	4.11141	3.99755	3.88867	3.78448	3.68474	3.58918	3.49760	3.40978	3.32551
7	4.71220	4.56376	4.42261	4.28830	4.16042	4.03857	3.92238	3.81153	3.70570	3.60459
8	5.14612	4.96764	4.79877	4.63886	4.48732	4.34359	4.20716	4.07757	3.95437	3.83716
9	5.53705	5.32825	5.13166	4.94637	4.77158	4.60654	4.45057	3.30302	4.16333	4.03097
10	5.88923	5.65022	5.42624	5.21612	5.01877	4.83323	4.65860	4.49409	4.33893	4.19247
11	6.20652	5.93770	5.68694	5.45273	5.23371	5.02864	4.83641	4.65601	4.48650	4.32706
12	6.49236	6.19437	5.91765	5.66029	5.42062	5.19711	4.98839	4.79322	4.61050	4.43922
13	6.74987	6.42355	6.12181	5.84236	5.58315	5.34233	5.11828	4.90951	4.71471	4.53268
14	6.98187	6.62817	6.30249	6.00207	5.72448	5.46753	5.22930	5.00806	4.80228	4.61057
15	7.19087	6.81086	6.46238	6.14217	5.84737	5.57546	5.32419	5.09158	4.87586	4.67547
16	7.37916	6.97399	6.60388	6.26506	5.95423	5.66850	5.40529	5.16235	4.39770	4.72956
17	7.54879	7.11963	6.72909	6.37286	6.04716	5.74870	5.47461	5.22233	4.98966	4.77463
18	7.70162	7.24967	6.83991	6.46742	6.12797	5.81785	5.53385	5.27316	5.03333	4.81219
19	7.83929	7.36578	6.93797	6.55037	6.19823	5.87746	5.58449	5.31624	5.07003	4.84350
20	7.96333	7.46944	7.02475	6.62313	6.25933	5.92884	5.62777	5.35275	5.10086	4.86958
21	8.07507	7.56200	7.10155	6.68696	6.31246	5.97314	5.66476	5.38368	5.12677	4.89132
22	8.17574	7.64465	7.16951	6.74294	6.35866	6.01133	5.69637	5.40990	5.14855	4.90943
23	8.26643	7.71843	7.22966	6.79206	6.39884	6.04425	5.72340	5.43212	5.16685	4.92453
24	8.34814	7.78432	7.28288	6.83514	6.43377	6.07263	5.74649	5.45095	5.18223	4.93710
25	8.42174	7.84314	7.32998	6.87293	6.46415	6.09709	5.76623	5.46691	5.19515	4.94759
26	8.48806	7.89566	7.37167	6.90608	6.49056	6.11818	5.78311	5.48043	5.20601	4.95632
27	8.54780	7.94255	7.40856	6.93515	6.51353	6.13636	5.79753	5.49189	5.21513	4.96360
28	8.60162	7.98442	7.44120	6.96066	6.53351	6.15204	5.80985	5.50160	5.22280	4.96967
29	8.65011	8.02181	7.47009	6.98304	6.55088	6.16555	5.82039	5.50983	5.22924	4.97472
30	8.69379	8.05518	7.49565	7.00266	6.56598	6.17720	5.82939	5.51681	5.23466	4.97894
31	8.73315	8.08499	7.51828	7.01988	6.57911	6.18724	5.83709	5.52272	5.23921	4.98245
32	8.76860	8.11159	7.53830	7.03498	6.59053	6.19590	5.84366	5.52773	5.24303	4.98537
33	8.80054	8.13535	7.55602	7.04823	6.60046	6.20336	5.84928	5.53197	5.24625	4.98781
34	8.82932	8.15656	7.57170	7.05985	6.60910	6.20979	5.85409	5.53557	5.24895	4.98984
35	8.85524	8.17550	7.58557	7.07005	6.61661	6.21534	5.85820	5.53862	5.25122	4.99154
36	8.87859	8.19241	7.59785	7.07899	6.62314	6.22012	5.86171	5.54120	5.25312	4.99295
37	8.89963	8.20751	7.60872	7.08683	6.62881	6.22424	5.86471	5.54339	5.25472	4.99412
38	8.91859	8.22099	7.61833	7.09371	6.63375	6.22779	5.86727	5.54525	5.25607	4.99510
39	8.93567	8.23303	7.62684	7.09975	6.63805	6.23086	5.86946	5.54682	5.25720	4.99592
40	8.95105	8.24378	7.63438	7.10504	6.64178	6.23350	5.87133	5.54815	5.25815	4.99660

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