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HOW TO READ A

**FINANCIAL
REPORT**

HOW TO READ A FINANCIAL REPORT

GOALS OF THIS BOOKLET

An annual report is unfamiliar terrain to many people. For those who are not accountants, analysts or financial planners, this booklet can help them to better understand such reports and possibly become more informed investors.

This booklet was written and designed to help educate and guide its readers so they might:

- Better understand the data included in financial reports and how to analyze it.
- Learn more about companies that offer employment or provide investment opportunities.

A good starting point for achieving these goals is to become familiar with the main components of a company's annual report.

Please Note: Highlighted throughout this booklet are key selected terms and definitions as a reference for readers. **See also the Glossary of Selected Terms in the back of this booklet.**

COMPONENTS OF AN ANNUAL REPORT

Most annual reports have three sections: (1) The Letter to Shareholders, (2) the Business Review and (3) the Financial Review. Each section serves a unique function:

- **The Letter to Shareholders** gives a broad overview of the company's business and financial performance.
- **The Business Review** summarizes a company's recent developments, trends and objectives.
- **The Financial Review** presents a company's business performance in dollar terms and consists of the

"Management's Discussion and Analysis" and "Audited Financial Statements." It may also contain supplemental financial information.

In **Management's Discussion and Analysis (MD&A)**, a company's management explains significant changes from year to year in the financial statements. Although presented mainly in narrative format, the MD&A may also include charts and graphs highlighting the year-to-year changes. The company's operating results, financial position, changes in shareholders' equity and cash flows are numerically captured and presented in the audited financial statements.

The financial statements generally consist of the balance sheet, income statement, statement of changes in shareholders' equity, statement of cash flows and footnotes. The annual financial statements usually are accompanied by an independent auditor's report (which is why they are called "audited" financial statements). An **audit** is a systematic examination of a company's financial statements; it is typically undertaken by a **Certified Public Accountant (CPA)**. The auditor's report attests to whether the financial reports are presented fairly in keeping with **generally accepted accounting principles**, known as GAAP for short.

Following is a brief description or overview of the basic financial statements, including the footnotes:

The Balance Sheet

The **balance sheet**, also called statement of financial position, portrays the financial position of the company by showing what the company owns and what it owes at the report date. The balance sheet may be thought of as a snapshot, since it reports the company's financial position at a specific point in time. Usually balance sheets represent the current period and a previous

HOW TO READ A FINANCIAL REPORT



period so that financial statement readers can easily identify significant changes.

The Income Statement

On the other hand, the **income statement** can be thought of more like a motion picture, since it reports on how a company performed during the period(s) presented and shows whether that company's operations have resulted in a profit or loss.



The Statement of Changes in Shareholders' Equity

The **statement of changes in shareholders' equity** reconciles the activity in the equity section of the balance sheet from period to period. Generally, changes in shareholders' equity result from company profits or losses, dividends and/or stock issuances. (**Dividends** are payments to shareholders to compensate them for their investment.)



The Statement of Cash Flows

The **statement of cash flows** reports on the company's cash movements during the period(s) separating them by operating, investing and financing activities.

The Footnotes

The **footnotes** provide more detailed information about the financial statements.

This booklet will focus on the basic financial statements, described above, and the related footnotes. It will also include some examples of methods that investors can use to analyze the basic financial statements in greater detail. Additionally, to illustrate how these concepts apply to a hypothetical, but realistic business, this booklet will present and analyze the financial statements of a model company.

A MODEL COMPANY CALLED "TYPICAL"

To provide a framework for illustration, a fictional company will be used. It will be a public company (generally, one whose shares are formally registered with the **Securities and Exchange Commission [SEC]** and actively traded). A public company will be used because it is required to provide the most extensive amount of information in its annual reports. The requirements and standards for financial reporting are set by both governmental and nongovernmental bodies. (The SEC is the major governmental body with responsibility in this arena. The main nongovernmental bodies that set rules and standards are the **Financial Accounting Standards Board [FASB]***, the **American Institute of Certified Public Accountants [AICPA]** and the **exchanges the securities trade on**.)

This fictional company will represent a typical corporation with the most commonly used accounting and reporting practices. Thus, the model company will be called Typical Manufacturing Company, Inc. (or "Typical," for short).

* The FASB is the primary, authoritative private-sector body that sets financial accounting standards. From time to time, these standards change and new ones are issued. At this writing, the FASB is considering substantial changes to the current accounting rules in the areas of consolidations, segment reporting, derivatives and hedging, and liabilities and equity. Information regarding current, revised or new rules can be obtained by writing or calling the Financial Accounting Standards Board, 401 Merritt 7, P.O. Box 5116, Norwalk, CT 06858-5116, telephone (203) 847-0700.

A FEW WORDS BEFORE BEGINNING

The following pages show a sample of the core or basic financial statements—a balance sheet, an income statement, a statement of changes in shareholders' equity and a statement of cash flows for Typical Manufacturing Company.

However, before beginning to examine these financial statements in depth, the following points should be kept in mind:

- Typical's financial statements are illustrative and generally representative for a manufacturing company. However, financial statements in certain specialized industries, such as banks, broker-dealers, insurance companies and public utilities, would look somewhat different. That's because specialized accounting and reporting principles and practices apply in these and other specialized industries.
- Rather than presenting a complete set of footnotes specific to Typical, this booklet presents a listing of appropriate generic footnote data for which a reader of financial statements should look.
- This booklet is designed as a broad, general overview of financial reporting, not an authoritative, technical reference document. Accordingly, specific technical accounting and financial reporting questions regarding a person's personal or professional activities should be referred to their CPA, accountant or qualified attorney.
- To simplify matters, the statements shown in this booklet do not illustrate every SEC financial reporting rule and regulation.

For example, the sample statements present Typical's balance sheet at two year-ends; income statements for two years; and a statement of changes in shareholders' equity and statement of cash flows for a one-year period. To strictly comply with SEC requirements, the report would have included income statements, statements of changes in shareholders' equity and statements of cash flows for three years. Also, the statements shown here do not include certain additional information required by the SEC. For instance, it does not include: (1) selected quarterly financial information (including recent market prices of the company's common stock), and (2) a listing of company directors and executive officers.

Further, the "MD&A" will not be presented nor will examples of the "Letter to Shareholders" and the "Business Review" be provided because these are not "core" elements of an annual report. Rather, they are generally intended to be explanatory, illustrative or supplemental in nature. To elaborate on these supplemental components could detract from this booklet's primary focus and goal: *Providing readers with a better understanding of the core or basic financial statements in an annual report.*





CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS

(Dollars in Thousands, Except Per-Share Amounts)

| | December 31 | |
|---|-------------------------|-------------------------|
| | 19X9 | 19X8 |
| Assets | | |
| Current Assets: | | |
| Cash and cash equivalents | \$19,500 | \$15,000 |
| Marketable securities | 46,300 | 32,000 |
| Accounts receivable—net of allowance for doubtful accounts of \$2,375 in 19X9 and \$3,000 in 19X8 | 156,000 | 145,000 |
| Inventories, at the lower of cost or market | 180,000 | 185,000 |
| Prepaid expenses and other current assets | <u>4,000</u> | <u>3,000</u> |
| Total Current Assets | <u>405,800</u> | <u>380,000</u> |
| Property, Plant and Equipment: | | |
| Land | 30,000 | 30,000 |
| Buildings | 125,000 | 118,500 |
| Machinery | 200,000 | 171,100 |
| Leasehold improvements | 15,000 | 15,000 |
| Furniture, fixtures, etc. | <u>15,000</u> | <u>12,000</u> |
| Total property, plant and equipment | 385,000 | 346,600 |
| Less: accumulated depreciation | <u>125,000</u> | <u>97,000</u> |
| Net Property, Plant and Equipment | <u>260,000</u> | <u>249,600</u> |
| Other Assets: | | |
| Intangibles (goodwill, patents)— net of accumulated amortization of \$300 in 19X9 and \$250 in 19X8 | 1,950 | 2,000 |
| Investment securities, at cost | 300 | — |
| Total Other Assets | <u>2,250</u> | <u>2,000</u> |
| Total Assets | <u>\$668,050</u> | <u>\$631,600</u> |



CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS

| | December 31 | |
|--|------------------|------------------|
| | 19X9 | 19X8 |
| Liabilities and Shareholders' Equity | | |
| Liabilities: | | |
| Current Liabilities: | | |
| Accounts payable | \$60,000 | \$57,000 |
| Notes payable | 51,000 | 61,000 |
| Accrued expenses | 30,000 | 36,000 |
| Income taxes payable | 17,000 | 15,000 |
| Other liabilities | 12,000 | 12,000 |
| Current portion of long-term debt | 6,000 | — |
| Total Current Liabilities | 176,000 | 181,000 |
| Long-term Liabilities: | | |
| Deferred income taxes | 16,000 | 9,000 |
| 9.12% debentures payable 2010 | 130,000 | 130,000 |
| Other long-term debt | — | 6,000 |
| Total Liabilities | 322,000 | 326,000 |
| Shareholders' Equity: | | |
| Preferred stock, \$5.83 cumulative, \$100 par value; authorized, issued and outstanding: 60,000 shares | 6,000 | 6,000 |
| Common stock, \$5.00 par value, authorized: 20,000,000 shares; issued and outstanding: 19X9 - 15,000,000 shares, 19X8 - 14,500,000 shares | 75,000 | 72,500 |
| Additional paid-in capital | 20,000 | 13,500 |
| Retained earnings | 249,000 | 219,600 |
| Foreign currency translation adjustments (net of taxes) | 1,000 | (1,000) |
| Unrealized gain on available-for-sale securities (net of taxes) | 50 | — |
| Less: Treasury stock at cost (19X9 and 19X8 - 1,000 shares) | (5,000) | (5,000) |
| Total Shareholders' Equity | 346,050 | 305,600 |
| Total Liabilities and Shareholders' Equity | \$668,050 | \$631,600 |



CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(Dollars in Thousands, Except Per-Share Amounts)

| | Years Ended December 31 | |
|--|-------------------------|-----------------|
| | 19X9 | 19X8 |
| Net sales | \$765,050 | \$725,000 |
| Cost of sales | 535,000 | 517,000 |
| Gross margin | 230,050 | 208,000 |
| Operating expenses: | | |
| Depreciation and amortization | 28,050 | 25,000 |
| Selling, general and administrative expenses | 96,804 | 109,500 |
| Operating income | 105,196 | 73,500 |
| Other income (expense): | | |
| Dividend and interest income | 5,250 | 10,000 |
| Interest expense | (16,250) | (16,750) |
| Income before income taxes and extraordinary loss | 94,196 | 66,750 |
| Income taxes | 41,446 | 26,250 |
| Income before extraordinary loss | 52,750 | 40,500 |
| Extraordinary item: loss on earthquake destruction (net of income tax benefit of \$750) | (5,000) | — |
| Net income | \$47,750 | \$40,500 |
| Earnings per common share: | | |
| Before extraordinary loss | \$3.55 | \$2.77 |
| Extraordinary loss | (.34) | — |
| Net income per common share | \$3.21 | \$2.77 |

See Accompanying Notes to Consolidated Financial Statements

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

(Dollars in Thousands)

Year Ended December 31, 19X9

| | Preferred stock | Common stock | Additional paid-in capital | Retained earnings | Foreign currency translation adjustments | Unrealized security gain | Treasury stock | Total |
|--|-----------------|-----------------|----------------------------|-------------------|--|--------------------------|------------------|------------------|
| Balance Jan. 1, 19X9 | \$6,000 | \$72,500 | \$13,500 | \$219,600 | (\$1,000) | — | (\$5,000) | \$305,600 |
| Net income | | | | 47,750 | | | | 47,750 |
| Dividends paid on: | | | | | | | | |
| Preferred stock | | | | (350) | | | | (350) |
| Common stock | | | | (18,000) | | | | (18,000) |
| Common stock issued | | 2,500 | 6,500 | | | | | 9,000 |
| Foreign currency translation gain | | | | | 2,000 | | | 2,000 |
| Net unrealized gain on available-for-sale securities | | | | | | \$50 | | \$50 |
| Balance Dec. 31, 19X9 | \$6,000 | \$75,000 | \$20,000 | \$249,000 | \$1,000 | \$50 | (\$5,000) | \$346,050 |



CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF CASH FLOWS

(Dollars in Thousands)

Year Ended December 31, 19X9

Cash flows from operating activities:

| | |
|--|----------------------|
| Net income | \$47,750 |
| Adjustments to reconcile net income to net cash from operating activities: | |
| Depreciation and amortization | 28,050 |
| Increase in accounts receivable | (11,000) |
| Decrease in inventory | 5,000 |
| Increase in prepaid expenses and other current assets | (1,000) |
| Increase in deferred taxes | 7,000 |
| Increase in accounts payable | 3,000 |
| Decrease in accrued expenses | (6,000) |
| Increase in income taxes payable | 2,000 |
| Total adjustments | <u>27,050</u> |
| Net cash provided by operating activities | <u>74,800</u> |

Cash flows from investing activities:

| | |
|---|------------------------|
| Securities purchases: | |
| Trading | (14,100) |
| Held-to-maturity | (350) |
| Available-for-sale | (150) |
| Principal payment received on held-to-maturity securities | 50 |
| Purchase of fixed assets | <u>(38,400)</u> |
| Net cash used in investing activities | <u>(52,950)</u> |

Cash flows from financing activities:

| | |
|--|------------------------|
| Payment of notes payable | (10,000) |
| Proceeds from issuance of common stock | 9,000 |
| Payment of dividends | <u>(18,350)</u> |
| Net cash used in financing activities | <u>(19,350)</u> |

| | |
|---|------------------------|
| Effect of exchange rate changes on cash | <u>2,000</u> |
| Increase in cash | 4,500 |
| Cash and cash equivalents at beginning of year | <u>15,000</u> |
| Cash and cash equivalents at the end of year | <u>\$19,500</u> |

Income tax payments totaled \$3,000 in 19X9.

Interest payments totaled \$16,250 in 19X9.

See Accompanying Notes to Consolidated Financial Statements

THE BALANCE SHEET



The balance sheet represents the financial picture for Typical Manufacturing as it stood at the end of one particular day, Dec. 31, 19X9, as though the company were momentarily at a standstill. Typical's balance sheet for the previous year end is also presented. This makes it possible to compare the composition of the balance sheets on those dates.

The balance sheet is divided into two halves:

1. **Assets**, always presented first (either on the top or left side of the page);
2. **Liabilities and Shareholders' Equity** (always presented below or to the right of Assets).

In the standard accounting model, the formula of **Assets = Liabilities + Shareholders' Equity** applies. As such, both halves are always in balance. They are also in balance because, from an economic viewpoint, each dollar of assets must be "funded" by a dollar of liabilities or equity. (Note: this is why this statement is called a balance sheet.)

Reported assets, liabilities, and shareholders' equity are subdivided into line items or groups of similar "accounts" having a dollar amount or "balance."

- The **Assets** section includes all the goods and property owned by the company, and uncollected amounts due ("receivables") to the company from others.
- The **Liabilities** section includes all debts and amounts owed ("payables") to outside parties and lenders.
- The **Shareholders' Equity** section represents the shareholders' ownership interest in the company—what the company's assets would be worth after all claims upon those assets were paid.

Now, to make it easier to understand the composition of the balance sheet, each of its sections and the related line items within them will be examined one-by-one starting on page 9. To facilitate this walk-through, the balance sheet has been summarized, this time numbering each of its line items or accounts. In the discussion that follows, each line item and how it works will be explained. After examining the balance sheet, the income statement will be analyzed using the same methodology. Then, the other financial statements will be broken down element-by-element for similar analysis.

A NOTE ABOUT NUMBERS AND CALCULATIONS

Before beginning, however, it's important to clarify how the numbers, calculations and numerical examples are presented in this booklet. All dollar amounts relating to the financial statements are presented in thousands of dollars with the following exceptions:

(1) Per-share or share amounts are actual amounts; (2) actual amounts are used for accuracy of calculation in certain per-share computations; and (3) actual amounts are used in certain examples to illustrate a point about items not related to, nor shown in, the model financial statements. The parenthetical statement "*(Actual Amounts Used)*" will further identify amounts or computations where figures do not represent thousands of dollars.

THE BALANCE SHEET

ASSETS

CURRENT ASSETS

In general, **current assets** include cash and those assets that, in the normal course of business, will be turned into cash within a year from the balance-sheet date. Current assets are listed on the balance sheet in order of their “liquidity” or amount of time it takes to convert them into cash.

Cash and Cash Equivalents

This, just as expected, is money on deposit in the bank, cash on hand (petty cash) and highly liquid securities such as Treasury bills.

| | | |
|---|---------------------------|-----------------|
| 1 | Cash and cash equivalents | \$19,500 |
|---|---------------------------|-----------------|

Marketable Securities

Excess or idle cash that is not needed immediately may be invested in marketable securities. These are short-term securities that are readily salable and usually have quoted prices. These may include:

- **Trading securities**—debt and equity securities, bought and sold frequently, primarily to generate short-term profits and which are carried at fair market value. Any changes in such values are included in earnings. (**Fair market value** is the price at which a buyer and seller are willing to exchange an asset in other than a forced liquidation.)

CONSOLIDATED BALANCE SHEETS

(Dollars in Thousands, Except Per-Share Amounts)

December 31

| Assets | 19X9 | 19X8 |
|--|------------------|------------------|
| Current Assets: | | |
| 1 Cash and cash equivalents | \$19,500 | \$15,000 |
| 2 Marketable securities | 46,300 | 32,000 |
| 3 Accounts receivable—net of allowance for doubtful accounts | 156,000 | 145,000 |
| 4 Inventories | 180,000 | 185,000 |
| 5 Prepaid expenses and other current assets | 4,000 | 3,000 |
| 6 Total Current Assets | 405,800 | 380,000 |
| 7 Total Property, plant and equipment | 385,000 | 346,600 |
| 8 Less: accumulated depreciation | 125,000 | 97,000 |
| 9 Net Property, Plant and Equipment | 260,000 | 249,600 |
| Other Assets: | | |
| 10 Intangibles (goodwill, patents)—net of accumulated amortization | 1,950 | 2,000 |
| 11 Investment securities, at cost | 300 | — |
| Total Other Assets | 2,250 | 2,000 |
| 12 Total Assets | \$668,050 | \$631,600 |

THE BALANCE SHEET

■ **Held-to-maturity securities**—debt securities that the company has the ability and intent to hold to maturity. “Maturity” is the date when debt instruments, such as Treasury bills, are due and payable. These securities are reported at amortized cost (original cost adjusted for changes in any purchase discount or premium less any principal payments received). (**Debt amortization** is the practice of adjusting the original cost of a debt instrument as principal payments are received and writing off any purchase discount or premium to income over the life of the instrument.)

■ **Available-for-sale securities**—debt or equity securities not classified as either trading or held-to-maturity. They are recorded at fair value with unrealized changes in their value, net of taxes, reported in stockholders’ equity. (**Net of taxes** means that the value or amount has been adjusted for the effects of applicable taxes.)

In Typical’s case, it owns short-term, high-grade commercial paper, classified as “trading securities” and preferred stock, classified as “available-for-sale.” Typical, however, has no short-term “held-to-maturity” securities (although it does have an investment in publicly traded mortgage bonds, a long-term “held-to-maturity” debt security, which will be discussed a bit later).

| | | |
|---|------------------------|-----------------|
| 2 | Marketable securities: | |
| | Trading securities | \$46,100 |
| | Available-for-sale | <u>200</u> |
| | | <u>\$46,300</u> |

Accounts Receivable

Here are found the amounts due from customers that haven’t been collected as yet. When goods are shipped to customers before payment or collection, an **account receivable** is recorded. Customers are usually given 30, 60 or 90 days in which to pay. The total amount due from customers is \$158,375.

However, experience shows that some customers fail to pay their bills (for example, because of financial difficulties), giving rise to accounts of doubtful collectibility. This simply means it is unlikely that the entire balance recorded as due and receivable will be collected. Therefore, in order to show the accounts receivable balance at a figure representing expected receipts, an **allowance for doubtful accounts** is deducted from the total amount recorded. This year end, the allowance for doubtful accounts was \$2,375.

| | | |
|---|----------------------|------------------|
| 3 | Accounts receivable— | \$158,375 |
| | Less: allowance for | |
| | doubtful accounts | <u>(2,375)</u> |
| | | <u>\$156,000</u> |

Inventory

Inventory for a manufacturing company consists of: (1) Raw materials—items to be used in making a product (for example, the silk fabric used in making a silk blouse); (2) work-in-process—partially completed goods in the process of manufacture (for example, pieces of fabric such as a sleeve and cuff sewn together during the process of making a silk blouse) and (3) finished goods—completed items ready for shipment to customers. Generally, the amount of each of the above types of inventory would be disclosed either on the face

THE BALANCE SHEET

of the balance sheet or in the footnotes. For Typical, **inventory** represents the cost of items on hand that were purchased and/or manufactured for sale to customers. In valuing inventories, the **lower of cost or market rule** or method is used. This generally accepted rule or method values inventory at its cost or market price, whichever is lower. (Here **market value**, or **market price** is the current cost of replacing the inventory by purchase or manufacture, as the case may be, with certain exceptions.) This provides a conservative figure. The value for balance-sheet purposes under this method usually will be cost. However, where deterioration, obsolescence, a decline in prices or other factors are expected to result in the selling or disposing of inventories below cost, the lower market price would be used.

Usually, a manufacturer's inventories consist of quantities of physical products assembled from various materials. Inventory valuation includes the direct costs of purchasing the various materials used to produce the company's products and an allocation (that is, an apportionment or dividing up) of the production expenses to make those products. Manufacturers use cost accounting systems to allocate such expenses. ("Cost accounting" focuses on specific products and is a specialized set of accounting procedures that are used to determine individual product costs.) When the individual costs for inventory are added up, they comprise the inventory valuation.

4 Inventories **\$180,000**

Prepaid Expenses

During the year, Typical paid fire insurance premiums and advertising charges for periods after the balance-sheet date. Since Typical has the contractual right to that insurance and advertising service after the balance-sheet date, it has an asset, which will be used after year end. Typical has simply "prepaid"—paid in advance—for the right to use this service. Of course, if these payments had not been made, the company would have more cash in the bank. Accordingly, payments made for which the company had not yet received benefits, but for which it will receive benefits within the year, are listed among current assets as **prepaid expenses**.

5 Prepaid expenses
and other current assets **\$4,000**

TOTAL CURRENT ASSETS

To summarize, the "Total Current Assets" item includes primarily cash, marketable securities, accounts receivable, inventories and prepaid expenses.

6 Total Current Assets **\$405,800**

These assets are "working" assets in the sense that they are "liquid"—meaning they can and will, in the near term, be converted into cash for other business purposes or consumed in the business. Inventories, when sold, become accounts receivable; receivables, upon collection, become cash; and the cash can then be used to pay the company's debts and operating expenses.

THE BALANCE SHEET

Property, Plant and Equipment

Property, plant and equipment (often referred to as **fixed assets**) consists of assets not intended for sale that are used to manufacture, display, warehouse and transport the company's products and house its employees. This category includes land, buildings, machinery, equipment, furniture, automobiles and trucks. The generally accepted method for reporting fixed assets is cost minus the depreciation accumulated through the date of the balance sheet. Depreciation will be defined and explained further in discussing the next topic.

| | |
|--|-------------------------|
| Property, Plant and Equipment: | |
| Land | \$30,000 |
| Buildings | 125,000 |
| Machinery | 200,000 |
| Leasehold improvements | 15,000 |
| Furniture, fixtures, etc. | 15,000 |
| 7 Total property, plant and equipment | <u>\$385,000</u> |

The figure displayed is not intended to reflect present market value or replacement cost, since generally there is no intent to sell or replace these assets in the near term. The cost to ultimately replace plant and equipment at some future date might, and probably will, be higher.

Depreciation

This is the practice of charging to, or expensing against income, the cost of a fixed asset over its estimated useful life. (**Estimated useful life** is the pro-

jected period of time over which an asset is expected to have productive or continuing value to its owner.)

Depreciation has been defined for accounting purposes as the decline in useful value of a fixed asset due to "wear and tear" from use and the passage of time.

The cost of acquired property, plant and equipment must be allocated over its expected useful life, taking into consideration the factors discussed above. For example, suppose a delivery truck costs \$10,000 and is expected to last five years. Using the "straight-line method of depreciation" (equal periodic depreciation charges over the life of the asset), \$2,000 of the truck's cost is charged or expensed to each year's income statement. The balance sheet at the end of one year would show:

| | |
|------------------------------|------------------------|
| <i>(Actual Amounts Used)</i> | |
| Truck (cost) | \$10,000 |
| Less: | |
| accumulated depreciation | <u>(2,000)</u> |
| Net depreciated cost | <u>\$ 8,000</u> |

At the end of the second year it would show:

| | |
|------------------------------|------------------------|
| <i>(Actual Amounts Used)</i> | |
| Truck (cost) | \$10,000 |
| Less: | |
| accumulated depreciation | <u>(4,000)</u> |
| Net depreciated cost | <u>\$ 6,000</u> |

THE BALANCE SHEET

In Typical's balance sheet, an amount is shown for **accumulated depreciation**. This amount is the total of accumulated depreciation for buildings, machinery, leasehold improvements and furniture and fixtures. Land is not subject to depreciation, and, generally, its reported balance remains unchanged from year to year at the amount for which it was acquired.

| | | |
|---|--------------------------------|------------------|
| 8 | Less: accumulated depreciation | \$125,000 |
|---|--------------------------------|------------------|

Thus, net property, plant and equipment is the amount reported for balance-sheet purposes of the investment in property, plant and equipment. As explained previously, it consists of the cost of the various assets in this classification, less the depreciation accumulated to the date of the financial statement (net depreciated cost).

| | | |
|---|-----------------------------------|------------------|
| 9 | Net Property, Plant and Equipment | \$260,000 |
|---|-----------------------------------|------------------|

Depletion is a term used primarily by mining and oil companies or any of the so-called extractive industries. Since Typical Manufacturing is not in any of these businesses, depletion is not shown in its financial statements. To "deplete" means to exhaust or use up. As oil or other natural resources are used up or sold, depletion is recorded (as a charge against income and a reduction from its cost) to recognize the amount of natural resources sold, consumed or used to date.

Deferred Charges

Deferred charges are expenditures for items that will benefit future periods beyond one year from the balance-sheet date; for example, costs for introduction of a new product to the market or the opening of a new location. Deferred charges are similar to prepaid expenses, but are not included in current assets because the benefit from such expenditures will be reaped over periods after one year from the balance-sheet date. (To "defer" means to put off or postpone to a future time.) The expenditure incurred will be gradually written off over the future period(s) that benefit from it, rather than fully charged off in the year payment is made. Typical's balance sheet shows no deferred charges because it has none. Deferred charges would normally be included just before Intangibles in the Assets section of the balance sheet.

Intangibles

Intangible assets (or "intangibles") are assets having no physical existence, yet having substantial value to the company. Examples are a franchise to a cable TV company allowing exclusive service in certain areas, a patent for exclusive manufacture of a specific article, a trademark or a copyright.

Another intangible asset often found in corporate balance sheets is **goodwill**, which represents the amount by which the price of an acquired company exceeds the fair value of the related net assets acquired. This excess is presumed to be the value of the company's name, reputation, customer base, intellectual capital and workforce (their know-how, experience, managerial skills and so forth.)

THE BALANCE SHEET

Intangible assets reported on the balance sheet are generally those purchased from others. Intangible assets are amortized (gradually reduced or written off, a process referred to as **amortization**) by periodic charges against income over their estimated useful lives, but in no case for longer than 40 years. The value of Typical's intangible assets, reduced by the total amount of these periodic charges against income (**accumulated amortization**), results in a figure for Typical's net intangible assets.

| | |
|-----------------------|-----------------------|
| 10 Intangibles | |
| (goodwill, patents)— | \$ 2,250 |
| Less: accumulated | |
| amortization | <u>(300)</u> |
| Net intangible assets | <u>\$1,950</u> |

Investment Securities

Investments in debt securities are carried at amortized cost only when they qualify as “held-to-maturity.” To so qualify, the investor must have the positive intent and the ability to hold those securities until they mature. Early in 19X9, Typical purchased on the New York Stock Exchange mortgage bonds issued by one of its major suppliers. These bonds are due in full in five years and bear interest at 8% per year. In 19X9, the issuer made an unscheduled principal prepayment of \$50. Since Typical intends to maintain a continuing relationship with this supplier and to hold the bonds until they mature—and appears to have the financial strength to do so—this investment is classified as “held-to-maturity.”

| | |
|-----------------------------------|---------------------|
| 11 Investment securities, at cost | |
| 8% mortgage bonds due | |
| 19Y4, original cost | \$350 |
| Less: principal prepayment | |
| in 19X9 | <u>(50)</u> |
| Investment securities | |
| at amortized cost | <u>\$300</u> |

However, this investment must also be reviewed to ensure that it is probable that all contractually specified amounts are fully collectible. If not fully collectible, this investment would be considered permanently impaired. If such **permanent impairment** were found to exist, it would be necessary to write this investment down to its fair value. In this case, however, the issuer is in a strong financial condition. This is evidenced in two ways. First, the issuer made an unscheduled prepayment of principal. Second, the property values have increased significantly where this well-maintained plant that secures these bonds is located. As such, there is no reason to suspect that all contractual amounts will not be collected. Thus, there is no impairment, and no write down is necessary.

TOTAL ASSETS

All of these assets (line items 1 to 11), added together, make up the figure for the line item “Total Assets” in Typical's balance sheet.

| | |
|-----------------|------------------|
| 12 Total Assets | \$668,050 |
|-----------------|------------------|

THE BALANCE SHEET

LIABILITIES AND SHAREHOLDERS' EQUITY

CURRENT LIABILITIES

A **current liability**, in general, is an obligation that is due and payable within 12 months. The “current liabilities” item in the balance sheet is a companion to “current assets” because current assets are the source for payment of current debts. The relationship between the two is revealing. This relationship will be explored more closely a bit later. For now, however, the discussion will focus on the definition of the components of current liabilities.

Accounts Payable

Accounts payable is the amount the company owes to its regular business creditors from whom it has bought goods or services on open account.

| | |
|---------------------|-----------------|
| 13 Accounts payable | \$60,000 |
|---------------------|-----------------|

Notes Payable

If money is owed to a bank, individual, corporation or other lender under a promissory note, and it is due within one year of the balance sheet date, it appears under **notes payable**. It is evidence that the borrower named in the note is responsible for carrying out its terms, such as repaying the loan principal plus any interest charges. Notes may also be due after one year from the balance-sheet date when they would be included in long-term debt.

| | |
|------------------|-----------------|
| 14 Notes payable | \$51,000 |
|------------------|-----------------|

Accrued Expenses

As discussed, accounts payable are amounts owed by the company to its regular business creditors for routine purchases. The company also owes, on any given day, salaries and wages to its employees, interest on funds borrowed from banks and bondholders, fees to attorneys and similar items. The total amount of such items owed, but unpaid at the date of the balance sheet, are grouped as a total under **accrued expenses**.

| | |
|---------------------|-----------------|
| 15 Accrued expenses | \$30,000 |
|---------------------|-----------------|

Income Taxes Payable

Income taxes payable are the amounts due to taxing authorities (such as the Internal Revenue Service and various state, foreign and local taxing agencies) within one year from the balance-sheet date. For financial-reporting purposes, they are treated the same as an accrued expense. However, companies that owe a material amount of taxes, as Typical does here, often report income taxes payable as a separate line item under the Current Liabilities caption in the balance sheet.

| | |
|-------------------------|-----------------|
| 16 Income taxes payable | \$17,000 |
|-------------------------|-----------------|

THE BALANCE SHEET

CONSOLIDATED BALANCE SHEETS

(Dollars in Thousands, Except Per-Share Amounts)

| | December 31 | |
|---|------------------|------------------|
| | 19X9 | 19X8 |
| Liabilities and Shareholders' Equity | | |
| Liabilities: | | |
| Current Liabilities: | | |
| 13 Accounts payable | \$60,000 | \$57,000 |
| 14 Notes payable | 51,000 | 61,000 |
| 15 Accrued expenses | 30,000 | 36,000 |
| 16 Income taxes payable | 17,000 | 15,000 |
| 17 Other liabilities | 12,000 | 12,000 |
| 18 Current portion of long-term debt | 6,000 | — |
| 19 Total Current Liabilities | 176,000 | 181,000 |
| Long-term Liabilities: | | |
| 20 Deferred income taxes | 16,000 | 9,000 |
| 21 9.12% debentures payable 2010 | 130,000 | 130,000 |
| 22 Other long-term debt | — | 6,000 |
| 23 Total Liabilities | 322,000 | 326,000 |
| Shareholders' Equity: | | |
| 24 Preferred stock, \$5.83 cumulative, \$100 par value; authorized, issued and outstanding: 60,000 shares | 6,000 | 6,000 |
| 25 Common stock, \$ 5.00 par value, authorized: 20,000,000 shares; issued and outstanding: 19X9 – 15,000,000 shares, 19X8 – 14,500,000 shares | 75,000 | 72,500 |
| 26 Additional paid-in capital | 20,000 | 13,500 |
| 27 Retained earnings | 249,000 | 219,600 |
| 28 Foreign currency translation adjustments (net of tax) | 1,000 | (1,000) |
| 29 Unrealized gain on available-for-sale securities (net of taxes) | 50 | — |
| 30 Less: Treasury stock at cost (19X9 and 19X8 – 1,000 shares) | (5,000) | (5,000) |
| 31 Total Shareholders' Equity | 346,050 | 305,600 |
| 32 Total Liabilities and Shareholders' Equity | \$668,050 | \$631,600 |

THE BALANCE SHEET

Other Current Liabilities

Simply stated, these are any other liabilities that are payable within 12 months, but which haven't been captured in any of the other specific categories presented as current liabilities in the balance sheet.

| | |
|----------------------|----------|
| 17 Other liabilities | \$12,000 |
|----------------------|----------|

Current Portion of Long-Term Debt

Current portion of long-term debt represents the amount due and payable within 12 months of the balance-sheet date under all long-term (longer than one year) borrowing arrangements. In Typical's case, this is the scheduled repayment of a \$6,000 five-year note taken out by Typical four years ago and due next year. If Typical had a long-term borrowing calling for monthly payments (on a mortgage, for example), the sum of the principal payments due in the 12 months following the balance-sheet date would appear here.

| | |
|---|---------|
| 18 Current portion of long-term debt | \$6,000 |
|---|---------|

TOTAL CURRENT LIABILITIES

| | |
|------------------------------|-----------|
| 19 Total Current Liabilities | \$176,000 |
|------------------------------|-----------|

Finally, the "Total Current Liabilities" item sums up all of the items listed under this classification.

LONG-TERM LIABILITIES

Current liabilities include amounts due "within one year" from the balance-sheet date. **Long-term liabilities** are amounts due "after one year" from the date of the financial report, such as unfunded retiree

benefit obligations. (Typical's balance sheet does not show this obligation.)

Deferred Income Taxes

One of the long-term liabilities on the sample balance sheet is deferred income taxes.

Deferred income taxes are tax liabilities a company may postpone paying until some future time, often to encourage activities for the public's good. The opposite of deferred income tax liabilities are **deferred income tax assets**. They are future income tax credits recognized in advance of actually receiving them. Typical has not recorded any future income tax credit assets.

The government provides businesses with tax incentives to make certain kinds of investments that will benefit the economy as a whole. For instance, for tax-reporting purposes, a company can take accelerated depreciation deductions on its tax returns for investments in plant and equipment while using less rapid, more conventional depreciation for financial-reporting purposes. These rapid write-offs for tax purposes in the early years of investment reduce the amount of tax the company would otherwise owe currently (within 12 months) and defer payment into the future (beyond 12 months). However, at some point, the taxes must be paid. To recognize this future liability, companies include a charge for deferred taxes in their provision for tax expense in the income statement and show what the tax provision would be without the accelerated write-offs. The liability for that charge is reported as a long-term liability since it relates to property, plant and equipment (a noncurrent or long-term asset). [The classification of deferred tax amounts follows the classification of the item that gives rise to it.]

| | |
|--------------------------|----------|
| 20 Deferred income taxes | \$16,000 |
|--------------------------|----------|

THE BALANCE SHEET

Debentures

The other long-term liability with a balance on Typical's 19X9 balance sheet is the 9.12% debentures due in 2010. The money was received by the company as a loan from the bondholders, who in turn were given certificates called **bonds**, as evidence of the loan. The bonds are really formal promissory notes issued by the company, which it agreed to repay at maturity in 2010 and on which it agreed to pay interest at the rate of 9.12% per year. Bond interest is usually payable semiannually. Typical's bond issue is called a **debenture** because the bonds are backed only by the general credit of the corporation rather than by specific company assets.

Companies can also issue secured debt (for example, **mortgage bonds**), which offers bondholders an added safeguard because they are secured by a mortgage on all or some of the company's property. If the company is unable to pay the bonds when they are due, holders of mortgage bonds have a claim or lien before other creditors (such as debenture holders) on the mortgaged assets. In other words, these assets may be sold and the proceeds used to satisfy the debt owed the mortgage bondholders.

| | |
|----------------------------------|------------------|
| 21 9.12% debentures payable 2010 | \$130,000 |
|----------------------------------|------------------|

Other Long-Term Debt

Other long-term debt includes all debt due after one year from the balance-sheet date other than what is specifically reported elsewhere in the balance sheet. In Typical's case, this debt is a \$6,000, single-payment loan made four years ago, which is scheduled for payment in full next year. This loan was reported as long-term debt at the end of 19X8 and, since it is payable in full next year, and it no longer qualifies as a long-term liability, is reported as current portion of long-term debt at the end of 19X9.

| | |
|-------------------------|---|
| 22 Other long-term debt | — |
|-------------------------|---|

TOTAL LIABILITIES

Current and long-term liabilities are summed together to produce the figure reported on the balance sheet as "Total Liabilities."

| | |
|----------------------|------------------|
| 23 Total Liabilities | \$322,000 |
|----------------------|------------------|

SHAREHOLDERS' EQUITY

This item is the total equity interest that all shareholders have in this corporation. In other words, it is the corporation's net worth or its assets after subtracting all of its liabilities. This is separated for legal and accounting reasons into the categories discussed on the following pages.

THE BALANCE SHEET

Capital Stock

Capital stock represents shares in the ownership of the company. These shares are represented by the stock certificates issued by the corporation to its shareholders. A corporation may issue several different classes of shares, each class having slightly different attributes.

Preferred Stock

Preferred stock is an equity ownership interest that has preference over common shares with regard to dividends and the distribution of assets in case of liquidation. Details about the preferences applicable to this type of stock can be obtained from provisions in a corporation's charter.

In Typical's case, the preferred stock is a \$5.83 cumulative \$100 par value. (**Par value** is the nominal or face value of a security assigned to it by its issuer.) The \$5.83 is the yearly per-share dividend to which each preferred shareholder is entitled before any dividends are paid to the common shareholders. "Cumulative" means that if in any year the preferred dividend is not paid, it accumulates (continues to grow) in favor of preferred shareholders. The total unpaid dividends must be declared and paid to these shareholders when available and before any dividends are distributed on the common stock. Generally, preferred shareholders have no voice in company affairs unless the company fails to pay them dividends at the promised rate.

24 Preferred stock, \$5.83 cumulative,
\$100 par value; authorized
issued and outstanding:
60,000 shares **\$6,000**

Common Stock

Although preferred shareholders are entitled to dividends before common shareholders, their entitlement is generally limited (in Typical's case to \$5.83 per share, annually). Common stock has no such limit on dividends payable each year. In good times, when earnings are high, dividends may also be high. And when earnings drop, so may dividends. Typical's common stock has a par value of \$5.00 per share. In 19X9, Typical sold 500,000 shares of stock for a total of \$9,000. Of the \$9,000, \$2,500 is reported as common stock (500,000 shares at a par value of \$5.00). The balance, \$6,500, is reported as additional paid-in capital, as discussed under the next heading. When added to the prior year-end's common stock balance of \$72,500, the \$2,500 brings the common stock balance to \$75,000.

25 Common stock, \$5.00 par value,
authorized: 20,000,000 shares;
issued and outstanding:
15,000,000 shares **\$75,000**

Additional Paid-In Capital

Additional paid-in capital is the amount paid by shareholders in excess of the par or **stated value** of each share. In 19X9, paid-in capital increased by the \$6,500 discussed in the previous paragraph. When this amount is added to last year's ending balance of \$13,500, additional paid-in capital at Dec. 31, 19X9, comes to \$20,000.

26 Additional paid-in capital **\$20,000**

THE BALANCE SHEET

Retained Earnings

When a company first starts in business, it has no retained earnings. **Retained earnings** are the accumulated profits the company earns and reinvests or “retains” in the company. (In less successful companies where losses have exceeded profits over the years, those accumulated net losses will be reported as an “accumulated deficit.”) In other words, retained earnings increase by the amount of profits earned, less dividends declared to shareholders. If, at the end of its first year, profits are \$80,000, dividends of \$100 are paid on the preferred stock, and no dividends

are declared on the common, the balance sheet will show retained earnings of \$79,900. In the second year, if profits are \$140,000 and Typical pays \$200 in dividends on the preferred and \$400 on the common, retained earnings will be \$219,300.

The Dec. 31, 19X9, balance sheet for Typical shows the company has accumulated \$249,000 in retained earnings. The table below presents retained earnings from start-up through the end of 19X9.

| | |
|----------------------|------------------|
| 27 Retained earnings | \$249,000 |
|----------------------|------------------|

Calculation: Accumulated Retained Earnings

| | | |
|-------------------------------|----------------------------|-------------------------|
| Balance at start-up | | \$0 |
| Profit in year 1 | | 80,000 |
| Preferred dividends in year 1 | | (100) |
| <hr/> | | |
| Retained earnings: | End of year 1 | 79,900 |
| Profit in year 2 | | 140,000 |
| Dividends in year 2: | Preferred | (200) |
| | Common | (400) |
| <hr/> | | |
| Retained earnings: | End of year 2 | 219,300 |
| Aggregate profits: | Year 3 through 19X8 | 800,000 |
| Aggregate dividends: | Year 3 through 19X8 | (799,700) |
| <hr/> | | |
| Retained earnings: | 12/31/X8 and 1/1/X9 | 219,600 |
| Net income: | 19X9 | 47,750 |
| Dividends: | 19X9 | |
| | Preferred | (350) |
| | Common | (18,000) |
| <hr/> | | |
| Retained earnings: | 12/31/X9 | <u>\$249,000</u> |

THE BALANCE SHEET

Foreign Currency Translation Adjustments (Net of Taxes)

When a company has an ownership interest in a foreign entity, it may be required to include that entity's results in the company's consolidated financial statements. If that requirement applies, the financial statements of the foreign entity (prepared in foreign currency) must be translated into U.S. dollars. The gain or loss resulting from this translation, after the related tax expense or benefit, is reflected as a separate component of shareholders' equity and is called **foreign currency translation adjustments**. This adjustment should be distinguished from conversion gains or losses relating to completed transactions that are denominated in foreign currencies. Conversion gains or losses are included in a company's net income.

28 Foreign currency translation adjustments (net of taxes) **\$1,000**

Unrealized Gain on Available-for-Sale Securities (Net of Taxes)

Unrealized gain/loss is the change in the value (gain or loss) of securities classified as "available-for-sale" that are still being held. In Typical's case, this represents the difference (a gain here) between the cost (or previously reported fair market value) of investment securities classified as "available-for-sale" held at the balance-sheet date and their fair market value at that time. Since Typical still holds these securities and has not yet sold them, such differences have not been realized. As such, this unrealized amount is not included in the determination of current income. However, since these securities must be reported at their fair market value, the changes in that fair market value since purchase (or the previously report date) are reported, after the related income tax

expense or benefit, as a separate component of shareholders' equity. On Dec. 31, 19X9, the total fair market value of these securities exceeded their cost by \$65. However, that gain would have increased tax expense by \$15, producing a net unrealized gain of \$50. If these securities are sold, the difference between their original cost and the proceeds from such sale will be a realized gain or loss included in the determination of net income in that period.

29 Unrealized gain on available-for-sale securities (net of taxes) **\$50**

Treasury Stock

When a company buys its own stock back, that stock is recorded at cost and reported as **treasury stock**. (It is called treasury stock because after being reacquired by the company, it is returned to the company's treasury. The company can then resell or cancel that stock.) Treasury stock is reported as a deduction from shareholders' equity. Any gains or losses on the sale of such shares are reported as adjustments to shareholders' equity, but are not included in income. Treasury stock is not an asset.

30 Less: treasury stock at cost **(\$5,000)**

Total Shareholders' Equity

"Total Shareholders' Equity" is the sum of stock (less treasury stock), additional paid-in capital, retained earnings, foreign currency translation adjustments and unrealized gains on investment securities available for sale.

31 Total Shareholders' Equity **\$346,050**

JUST WHAT DOES THE BALANCE SHEET SHOW?



To analyze balance-sheet figures, investors look to certain financial statement ratios for guidance. (A **financial statement ratio** is the mathematical relationship between two or more amounts reported in the financial statements.) One of their concerns is whether the business will be able to pay its debts when they come due. Analysts are also interested in the company's inventory turnover and the amount of assets backing corporate securities (bonds and preferred and common stock), along with the relative mix of these securities. The following section will discuss some ratios and calculations used for balance-sheet analysis.

WORKING CAPITAL

One very important balance-sheet concept is **working capital**. This is the difference between total current assets and total current liabilities. Remember, current liabilities are debts due within one year of the balance-sheet date. The source from which those debts are paid is current assets. Thus, working capital represents the amount of current assets that is left if all current debts are paid.

For Typical this is:

| | | |
|----|---------------------------|-------------------------|
| 6 | Current assets | \$405,800 |
| 19 | Less: current liabilities | (176,000) |
| | Working capital | <u>\$229,800</u> |

Generally, companies that maintain a comfortable amount of working capital are more attractive to conservative investors. A company's ability to meet obligations, expand volume and take advantage of opportunities is often determined by its working capital. Year-to-year increases in working capital are a positive sign of a company's growth and health.

Current Ratio

What is a comfortable amount of working capital? Analysts use several methods to judge whether a company has adequate working capital. To interpret the current position of a company being considered as a possible investment, the current ratio may be more useful than the dollar total of working capital. The first rough test is to compare the current assets figure to the total current liabilities. Although there is considerable variation among different types of companies, and the relationship is significant only when comparisons are made between companies in the same industry, a current ratio of 2-to-1 is generally considered adequate. This means that for each \$1 of current liabilities, there are \$2 in current assets.

To find the **current ratio**, divide current assets by current liabilities. In Typical's balance sheet:

| | | | |
|----|---------------------|------------------|---------------------------|
| 16 | Current assets | \$405,800 | = 2.31 or 2.3 to 1 |
| 19 | Current liabilities | \$176,000 | 1 |

Thus, for each \$1 of current liabilities, there is \$2.31 in current assets to back it up. There are so many different kinds of companies, however, that this test requires a great deal of modification if it is to be really helpful in analyzing companies in different industries. Generally, companies that have a small inventory and accounts receivable that are quickly collectible can operate safely with a lower current ratio than companies having a greater proportion of their current assets in inventory and that sell their products on extended credit terms.

HOW QUICK IS QUICK?

In addition to working capital and the current ratio, another way to test the adequacy of working capital is to look at quick assets. What are **quick assets**? They're the assets available to cover a sudden emergency—

JUST WHAT DOES THE BALANCE SHEET SHOW?

assets that could be taken to the bank right away, if necessary. They are those current assets that are quickly convertible into cash. This excludes merchandise inventories, because such inventories have yet to be sold and are not quickly convertible into cash. Accordingly, quick assets are current assets minus inventories, prepaid expenses and any other illiquid current assets.

| | | |
|---|------------------------|-------------------------|
| 6 | Current assets | \$405,800 |
| 4 | Less: inventories | (180,000) |
| 5 | Less: prepaid expenses | (4,000) |
| | Quick assets | <u>\$221,800</u> |

The **quick assets ratio** is found by dividing quick assets by current liabilities.

This means that, for each \$1 of current liabilities, there is \$1.26 in quick assets available.

| | | |
|------------------------|------------------|----------------------------|
| Quick assets | \$221,800 | = 1.26 or 1.26 to 1 |
| 19 Current liabilities | \$176,000 | 1 |

Net quick assets are found by taking the quick assets and subtracting the total current liabilities. A well-positioned company should show a reasonable excess of quick assets over current liabilities. This provides a rigorous and important test of a company's ability to meet its obligations.

| | |
|------------------------------|------------------------|
| Quick assets | \$221,800 |
| 19 Less: current liabilities | (176,000) |
| Net quick assets | <u>\$45,800</u> |

DEBT TO EQUITY

A certain level of debt is acceptable, but too much is a sign for investors to be cautious. The **debt-to-equity ratio** is an indicator of whether the company is using debt excessively. For Typical, the debt-to-equity ratio is computed as follows:

| | | |
|-------------------------------|------------------|--------------|
| 23 Total Liabilities | \$322,000 | = .93 |
| 31 Total Shareholders' Equity | \$346,050 | |

A debt-to-equity ratio of .93 means the company is using 93 cents of liabilities for every dollar of shareholders' equity in the business. Normally, industrial companies try to remain below a maximum of a 1-to-1 ratio, to keep debt at a level that is less than the investment level of the owners of the business. Utilities, service companies and financial companies often operate with much higher ratios.

INVENTORY TURNOVER

How much inventory should a company have on hand? That depends on a combination of many factors including the type of business and the time of the year. An automobile dealer, for example, with a large stock of autos at the height of the season is in a strong inventory position; yet that same inventory at the end of the season represents a weakness in the dealer's financial condition.

JUST WHAT DOES THE BALANCE SHEET SHOW?

One way to measure the adequacy and balance of inventory is to compare it with the cost of sales for the year to determine the **inventory turnover**. This tells us how many times a year goods purchased by a company are sold to its customers. Typical's cost of sales for the year is \$535,000, which is divided by average inventory for the year of \$182,500 (inventory at 12/31/X8 of \$185,000 + inventory at 12/31/X9 of \$180,000, divided by 2) to determine turnover. Thus, turnover is 2.9 times ($\$535,000 \div \$182,500$), meaning that goods are bought, manufactured and sold out almost three times per year. (If this information is not readily available in some published statements, some analysts look instead for sales related to inventory.) "Inventory as a percentage of current assets" is another comparison that may be made. In Typical's case, the inventory of \$180,000 represents 44% of the total current assets, which amounts to \$405,800.

BOOK VALUE OF SECURITIES

Net book value or net asset value

is the amount of corporate assets backing a bond or a common or preferred share. Intangible assets are sometimes included when computing book value. However, the following calculations will focus on the more conservative net *tangible* book value. Here's how to calculate values for Typical's securities. (Refer to Calculations 1 to 4.)

Calculation 1:

| | | |
|----|---|------------------|
| 12 | Total assets | \$668,050 |
| 10 | Less: intangibles | <u>(1,950)</u> |
| | Total tangible assets | 666,100 |
| 19 | Less: current liabilities | <u>(176,000)</u> |
| | Net tangible assets available to meet bondholders' claims | <u>\$490,100</u> |

(Actual Amounts Used)

$$\frac{\$490,100,000}{130,000 \text{ (bonds outstanding)}} = \$3,770 \text{ net asset value per } \$1,000 \text{ bond outstanding}$$

Net Asset Value per Bond

To state this figure conservatively, intangible assets are subtracted as if they have no value on liquidation. Current liabilities of \$176,000 are considered paid. This leaves \$490,100 in assets to pay the bondholders. So, \$3,770 in net asset value protects each \$1,000 bond. (See Calculation 1 above.)

Net Asset Value per Share of Preferred Stock

To calculate net asset value of a preferred share, start with total tangible assets, conservatively stated at \$666,100 (eliminating \$1,950 of intangible assets). Current liabilities of \$176,000 and long-term liabilities of \$146,000 are considered paid. This leaves \$344,100 of assets protecting the preferred. So, \$5,735 in net asset value backs each share of preferred. (See Calculation 2 below.)

Calculation 2:

| | | |
|------------|--|------------------|
| 12 | Total assets | \$668,050 |
| 10 | Less: intangibles | <u>(1,950)</u> |
| | Total tangible assets | 666,100 |
| 19 | Less: current liabilities | <u>(176,000)</u> |
| 20, 21, 22 | Long-term liabilities | <u>(146,000)</u> |
| | Net tangible assets underlying the preferred stock | <u>\$344,100</u> |

(Actual Amounts Used)

$$\frac{\$344,100,000}{60,000 \text{ (preferred shares outstanding)}} = \$5,735 \text{ net asset value per preferred share}$$

JUST WHAT DOES THE BALANCE SHEET SHOW?

Book Value per Share of Common Stock

The **book value per share of common stock** can be thought of as the amount of money each share would receive if the company were liquidated, based on balance-sheet values. Of course, the bondholders and preferred shareholders would have to be satisfied first. The answer, \$22.54 book value per share of common stock, is arrived at as follows. (See *Calculation 3 below*.)

Calculation 3:

| | |
|--|-------------------------|
| 25 Common stock | \$75,000 |
| 26 Additional paid-in capital | 20,000 |
| 27 Retained earnings | 249,000 |
| 28 Foreign-currency translation adjustments | 1,000 |
| 29 Unrealized gains on available-for-sale securities | 50 |
| 30 Treasury stock | (5,000) |
| Total Common Shareholders' Equity | 340,050 |
| 10 Less: intangible assets | (1,950) |
| Total Tangible Common Shareholders' Equity | <u>\$338,100</u> |

(Actual Amounts Used)

\$338,100,000 = \$22.54 book value per common share
15,000,000 (common shares outstanding)

An alternative method of arriving at the common shareholders' equity, conservatively stated at \$338,100, is shown in Calculation 4 below.

Calculation 4:

| | |
|--|-------------------------|
| 12 Total assets | \$668,050 |
| 10 Less: intangibles | (1,950) |
| Total tangible assets | 666,100 |
| 19 Less: current liabilities | (176,000) |
| 20, 21, & 22 | |
| Long-term liabilities | (146,000) |
| 24 Preferred stock | (6,000) |
| Net tangible assets available for common stock | <u>\$338,100</u> |

(Actual Amounts Used)

\$338,100,000 = \$22.54 book value per common share
15,000,000 (common shares outstanding)

Book-value figures, particularly of common stocks, can be misleading. Profitable companies may show a very low net book value and very substantial earnings, while mature companies may show a high book value for their common stock but have such low or irregular earnings that the stock's market price is lower than its book value. Insurance companies, banks and investment companies are often exceptions. Because their assets are largely liquid (cash, accounts receivable and marketable securities), their common stock's book value is sometimes a fair indication of market value.

CAPITALIZATION RATIO

The proportion of each kind of security issued by a company is the **capitalization ratio**. A high proportion of bonds sometimes reduces the attractiveness of both the preferred and common stock, and too much preferred can detract from the common's value.

That's because bond interest must be paid before preferred dividends, and preferred dividends before common dividends.

Typical's bond ratio is derived by dividing the face value of the bonds, \$130,000, by the total value of bonds, preferred and common stock, additional paid-in capital, retained earnings, foreign currency translation adjustments, unrealized gains on available-for-sale securities and treasury stock, less intangibles, which is \$474,100. (See the Calculation on page 26.) This shows that bonds amount to about 27% of Typical's total capitalization.

JUST WHAT DOES THE BALANCE SHEET SHOW?

| | | |
|----|---|-------------------------|
| 21 | Debentures | \$130,000 |
| 24 | Preferred stock | 6,000 |
| 25 | Common stock | 75,000 |
| 26 | Additional paid-in capital | 20,000 |
| 27 | Retained earnings | 249,000 |
| 28 | Foreign currency translation adjustments | 1,000 |
| 29 | Unrealized gains on available-for-sale securities | 50 |
| 30 | Treasury stock | (5,000) |
| 10 | Less: intangibles | (1,950) |
| | Total Capitalization | <u>\$474,100</u> |

The **preferred stock ratio** is found the same way—by dividing preferred stock of \$6,000 by the entire capitalization of \$474,100. The result is about 1%.

The **common stock ratio** will be the difference between 100% and the total of the bond and preferred stock ratio—or about 72%. The same result is reached by adding common stock, additional paid-in capital, retained earnings, foreign currency translation adjustments, unrealized gains on available-for-sale securities and treasury stock, less intangibles, and dividing the result by total capitalization.

| | Amount | Ratio |
|--|-------------------------|--------------------|
| 21 Debentures | \$130,000 | 27% |
| 24 Preferred stock | 6,000 | 1% |
| 10 & 25–30 Common Shareholders Equity less intangibles | 338,100 | 72% |
| Total | <u>\$474,100</u> | <u>100%</u> |

THE INCOME STATEMENT

The most important report for many analysts, investors or potential investors is the income statement. It shows how much the corporation earned or lost during the year. It appears with numbered line items on page 27 of this booklet.

While the balance sheet shows the fundamental soundness of a company by reflecting its financial position at a given date, the income statement may be of greater interest to investors: The reasons are twofold:

- The income statement shows the record of a company's operating results for the whole year.
- It also serves as a valuable guide in anticipating how the company may do in the future.

However, the income statement for a single year does not tell the whole story. The historical record for a series of years is more important than the figures for any single year. Typical includes two years in its income statement and gives a 10-year financial summary as well, which appears on pages 42 and 43.

An income statement matches the revenues earned from selling goods and services or other activities against all the costs and outlays incurred to operate the company. The difference is the net income (or loss) for the year. The costs incurred usually consist of: Cost of sales; selling, general and administrative expenses, such as wages and salaries, rent, supplies and depreciation; interest on money borrowed; and taxes.

THE INCOME STATEMENT

CONSOLIDATED INCOME STATEMENTS

(Dollars in Thousands, Except Per-Share Amounts)

| | <u>Years Ended December 31</u> | |
|---|--------------------------------|------------------------|
| | <u>19X9</u> | <u>19X8</u> |
| 33 Net sales | \$765,050 | \$725,000 |
| 34 Cost of sales | <u>535,000</u> | <u>517,000</u> |
| 35 Gross margin | 230,050 | 208,000 |
| Operating expenses: | | |
| 36 Depreciation and amortization | 28,050 | 25,000 |
| 37 Selling, general and administrative expenses | <u>96,804</u> | <u>109,500</u> |
| 38 Operating income | 105,196 | 73,500 |
| Other income (expense): | | |
| 39 Dividend and interest income | 5,250 | 10,000 |
| 40 Interest expense | <u>(16,250)</u> | <u>(16,750)</u> |
| 41 Income before income taxes and extraordinary loss | 94,196 | 66,750 |
| 42 Income taxes | <u>41,446</u> | <u>26,250</u> |
| 43 Income before extraordinary loss | 52,750 | 40,500 |
| 44 Extraordinary item: Loss on earthquake destruction (net of income tax benefit of \$750) | <u>(5,000)</u> | <u>—</u> |
| 45 Net income | <u>\$47,750</u> | <u>\$40,500</u> |
| 46 Earnings per share of common stock before extraordinary loss | \$3.55 | \$2.77 |
| 47 Earnings per share—extraordinary loss | <u>(.34)</u> | <u>—</u> |
| 48 Net income per common share | <u>\$3.21</u> | <u>\$2.77</u> |

Net Sales

The most important source of revenue is usually the first item on the income statement. It represents the primary source of revenue earned by the company from its customers for goods sold or services rendered. In Typical Manufacturing's income statement, it is shown as "net sales." The "net sales" item includes the amount reported after taking into consideration returned goods and allowances for price reductions or discounts. By comparing net sales between 19X9 and 19X8, we see that sales increased in XXXX.

33 Net sales

\$765,050

Cost of Sales

In a manufacturing establishment, **cost of sales** represents all the costs the company incurs to purchase and convert raw materials into the finished products that it sells. These costs are commonly known as product costs. "Product costs" are those costs that can be identified with the purchase or manufacture of goods made available for sale.

There are three basic components of product cost: (1) Direct materials, (2) direct labor

THE INCOME STATEMENT

and (3) manufacturing overhead. Direct materials and direct labor costs can be directly traced to the finished product. For example, for a furniture manufacturer, lumber would be a direct material cost and carpenter wages would be a direct labor cost. Manufacturing overhead costs, while associated with the manufacturing process, cannot be traceable to the finished product. Examples of manufacturing overhead costs are costs associated with operating the factory plant (rent, electricity, supplies, depreciation, maintenance and repairs and the salaries of production supervisors).

34 Cost of sales **\$535,000**

Gross Margin

Gross margin is the excess of sales over cost of sales. It represents the actual direct profit from sales after considering product costs. Comparing period-to-period gross margin trends in absolute dollars is a useful analytical tool. So, too, is comparing the **gross margin percentage** (computed by dividing gross margin by net sales) from year to year.

35 Gross margin **\$230,050**
Gross margin percentage **30%**
($\$230,050 \div \$765,050$)

Tangible Depreciation and Non-tangible Amortization

Each year's decline in value would be captured here. **Amortization**, as reported in this line item, represents the decline in useful value of an intangible, such as a 17-year patent.

36 Depreciation and amortization **\$28,050**

Selling, General and Administrative Expenses

These expenses are generally grouped separately from cost of sales so that the reader of an income statement may see the extent of selling and administrative costs. These include expenses such as: sales agents' salaries and commissions; advertising and promotion; travel and entertainment; executives' salaries, office payroll; and office expenses.

37 Selling, general and administrative expenses **\$96,804**

Operating Income

Subtracting all operating expenses from the gross margin determines **operating income**.

38 Operating income **\$105,196**

Dividend and Interest Income

An additional source of revenue comes from dividends and interest received by the company from its investment in stocks and bonds.

39 Dividends and interest income **\$5,250**

Interest Expense

The **interest** earned by bondholders for the use of their money is sometimes referred to as a "fixed charge." That's because the interest must be paid year after year whether the company is making money or losing money. Interest differs from dividends on stocks, which are payable only if the board of directors declares them. Interest paid is another cost of doing business, and is deductible from earnings in order to arrive at a base for the payment of income taxes.

THE INCOME STATEMENT

Typical's interest expense comes from three sources: (1) Notes payable, (2) debentures and (3) other long-term debt (which became current portion of long-term debt at this year-end). The notes payable, with an average outstanding balance for the year of \$56,000 at 7% interest, incur an interest charge of \$3,920; the debentures, bearing interest at 9.12% on the \$130,000 balance, incur interest expense of \$11,856; and the \$6,000 of other long-term debt at 7.9% incurs interest of \$474.

| | |
|---------------------|-----------------|
| 40 Interest expense | \$16,250 |
|---------------------|-----------------|

Income Taxes

Each corporation has an "effective tax rate," which depends on the level and nature of its income. Large corporations like Typical Manufacturing are subject to the top statutory corporate income tax rate. However, tax credits, tax-free income and nondeductible expenses tend to change the overall tax rate. Typical's income before taxes and extraordinary loss is \$94,196; its tax comes to \$41,446.

| | |
|-----------------|-----------------|
| 41 Income taxes | \$41,446 |
|-----------------|-----------------|

Income Before Extraordinary Loss

"Income before extraordinary loss" for the year is the amount by which all revenues exceed all expenses. Extraordinary gains or losses (as defined by GAAP) are excluded from this determination.

| | |
|--|-----------------|
| 42 Income before income taxes and extraordinary loss | \$94,196 |
|--|-----------------|

| | |
|--|-----------------|
| 43 Income before extraordinary loss | \$52,750 |
|--|-----------------|

Extraordinary Items

Under usual conditions, the above income of

\$52,750 would be the end of the story. However, there are years in which companies experience unusual and infrequent events called **extraordinary items**. For example, an extraordinary item would be crop destruction by a hail storm in an area where hail storms are rare. In this case, one of Typical's manufacturing sites was destroyed by an earthquake. Since this event is not expected to recur, it is isolated on a separate line, net of its tax effect. Its earnings per share impact is also separated from the earnings per share attributable to "normal" operations.

| | |
|---|------------------|
| 44 Extraordinary item: loss on earthquake destruction (net of tax benefit of \$750) | (\$5,000) |
|---|------------------|

Net Income—the "Bottom Line"

Once all income and costs, including extraordinary items, are considered, **net income (or loss)** is determined.

| | |
|---------------|-----------------|
| 45 Net income | \$47,750 |
|---------------|-----------------|

Other Items

Three other items that do not apply to Typical could appear on an income statement. First, suppose Typical were heavily involved in research and development (R&D) activities. In that event, Typical would be required to include the amount of R&D costs in the income statement or disclose it in the footnotes.

Second, suppose Typical owned between 20% and 50% of another company. In that case, Typical would have "significant influence" over that company, but not "control" it. As such, it would have to account for that investment using the equity method and report its equity interest in that company in its financial statements. For example, suppose Typical's share of that company's earnings for the year were \$1,200 and it received \$700 in dividends from the company during that year.

THE INCOME STATEMENT

In that event, Typical would have to include \$1,200 on its income statement under the category “equity in the earnings of unconsolidated subsidiaries.” Typical would also be required to increase its investment in that company to the extent of the earnings it picked up in its (*i.e.*, Typical’s) income statement. However, this would be reduced by any dividends received, in this case \$700, since the dividend represents a return of its investment. In this case, Typical’s balance sheet would show a net increase in its investment in this company of \$500.

Third, suppose Typical owned a “consolidated” subsidiary (more than 50% ownership), in which it had less than a 100% ownership interest. For example, say it owned 85% of that company. Any material change in the related minority interest (15%), would have to be reported in the income statement or footnotes. A corresponding change in the cumulative minority interest would also have to be reported in the balance sheet, between long-term liabilities and stockholders’ equity.

ANALYZING THE INCOME STATEMENT

When used to make a few detailed comparisons, the income statement will reveal a lot more information about a company’s

19X9 Operating margin:

$$\frac{38 \text{ } \$105,196 \text{ Operating income}}{33 \text{ } \$765,050 \text{ Net sales}} = 13.8\%$$

operating results. For example, a prospective investor can determine the company’s operating margin and how it has changed over the years. This determination can be made

19X8 Operating margin:

$$\frac{38 \text{ } \$73,500 \text{ Operating income}}{33 \text{ } \$725,000 \text{ Net sales}} = 10.1\%$$

by comparing operating income to net sales. To illustrate, in 19X9, Typical reported net sales of \$765,050 and operating income of \$105,196.

This means that for each dollar of 19X9 sales, 13.8¢ remained as a profit from operations. This figure is interesting, but is more significant when compared with the operating margin last year.

Typical’s operating profit margin went from 10.1% to 13.8%, so business didn’t just grow, *it became more profitable*. Changes in operating margin can reflect changes in volume, efficiency, product line or types of customers served.

Typical can also be compared with other companies in its field. If Typical’s operating margin is very low compared to others, it is an unhealthy sign. If it is high, there is a basis for optimism.

Analysts also frequently use “operating cost ratio” for the same purpose. Operating cost ratio is the complement of the operating margin. Typical’s operating margin is 13.8%. The operating cost ratio is 86.2%.

| | Amount | Ratio |
|---------------------------------|-----------|--------|
| 33 Net sales | \$765,050 | 100.0% |
| 34, 36, & 37 Operating costs | \$659,854 | 86.2% |
| 38 Operating income | \$105,196 | 13.8% |

Net profit ratio is still another guide to indicate how satisfactory the year’s activities have been. In Typical’s case, the year’s net income was \$47,750. The net sales for the year amounted to \$765,050. Therefore, Typical’s income was \$47,750 on \$765,050 of sales or:

19X9 Net profit ratio:

$$\frac{45 \text{ } \$47,750 \text{ Net income}}{33 \text{ } \$765,050 \text{ Net Sales}} = 6.2\%$$

THE INCOME STATEMENT

This means that this year, for every \$1 of goods sold, 6.2¢ in profit was ultimately earned by the company. By comparing the net profit ratio from year to year for the same company and with other companies, profit progress can be evaluated.

Last year, Typical's net income was \$40,500 on \$725,000 in sales:

19X8 Net profit ratio:

$$\frac{45 \text{ } \$40,500 \text{ Net income}}{33 \text{ } \$725,000 \text{ Net Sales}} = 5.6\%$$

The operating margin, operating cost ratio and net profit ratio—like the ratios examined for the balance sheet—provide general information about the company and help assess its future prospects. All these comparisons have a long-term significance because they provide useful information about the company's fundamental economic condition. Another question to ponder: Are Typical's securities a good investment? Consideration of some additional factors can help provide an answer.

INTEREST COVERAGE

Typical's debentures represent a very substantial debt, but they are due many years in the future. The yearly interest, however, is a fixed charge. How readily the company can pay the interest on this debt (*i.e.*, the debt's interest coverage) would be of great interest to an investor. (**Interest coverage** is number of times the annual interest on a debt obligation is covered by income for the year without considering interest on the debt and taxes.) More specifically, an investor would like to know if the borrowed funds have been put to good use, so that the earnings are adequate and thus available to meet interest costs.

The available income representing the source for payment of the debenture interest is \$106,052 (operating profit plus dividend and interest income less the interest

expense on the other debt). The annual debenture interest amounts to \$11,856. This means the debenture's annual interest expense is covered 8.9 times.

Number of times

debenture interest earned:

$$\frac{\$106,052 \text{ Available income}}{\$11,856 \text{ Debenture interest}} = 8.9$$

For a corporate bond (debenture) to be considered a safe investment, most analysts say that the company should earn its bond interest requirement three to four times over. By these standards, Typical's debentures have a fair margin of safety.

WHAT ABOUT LEVERAGE?

Financial leverage relates a company's long-term debt and preferred stock to the company's common equity. Sometimes a stock is said to be **highly leveraged**. What this simply means is that the company issuing the stock has a large proportion of bonds and preferred stock outstanding relative to the amount of common stock.

"High leverage" can work for or against a company depending on the earnings available to the common shareholders. Generally speaking, however, analysts consider highly leveraged companies to be risk-prone. A simple illustration will show why. Take, for example, a company with \$10,000,000 of 4% bonds outstanding. If the company earns \$440,000 before bond interest, there will only be \$40,000 left for the common shareholders after payment of \$400,000 bond interest (\$10,000,000 at 4% equals \$400,000). However, an increase of only 10% in earnings (to \$484,000) will leave \$84,000 for common stock dividends, or an increase of more than 100%. If there is only a small amount of common stock issued, the increase in earnings per share will appear very impressive.

THE INCOME STATEMENT

But in this instance, it is also apparent that a decline of 10% in earnings (to \$396,000) would wipe out everything available for the common shareholders. Moreover, it would also result in the company's being unable to cover the full interest on its bonds without dipping into its cash reserves and retained earnings. This is the great danger of so-called highly leveraged companies. It also illustrates a fundamental weakness of companies that have a disproportionate amount of debt. Conservative investors usually steer clear of highly leveraged companies, although they do appeal to people seeking a higher return who are willing to assume the risk.

Typical Manufacturing, on the other hand, is not a highly leveraged company. In 19X8, Typical incurred \$11,856 in debenture interest and its income before extraordinary loss and this expense came to \$52,356 ($\$40,500 + \$11,856 = \$52,356$). This left \$40,500 for the common and preferred stockholders and retained earnings after recording this interest.

Now look what happened this year. Net profit before extraordinary loss and debenture interest rose by \$12,250 ($[\$52,750 + \$11,856 = \$64,606] - \$52,356 = \$12,250$) or about 23%. Since the bond interest stayed the same, income before extraordinary loss and after recording this interest also rose \$12,250. But that is about 30% of \$40,500. While this is certainly not a dramatic example of leverage, a 23% increase in pretax earnings generates a 30% increase in amounts available for dividends or retained earnings. While this only illustrates the leverage effect of the interest on the debentures, similar calculations could be made to show the impact of the interest expense related to the other borrowings and total interest expense.

PREFERRED DIVIDEND COVERAGE

To calculate the **preferred dividend coverage** (the number of times preferred

dividends were earned), net profit must be used as the base. That's because federal income taxes and all interest charges must be paid before anything is available for shareholders. Because the 60,000 shares of \$100 par value preferred stock pay a per share dividend of \$5.83, the total dividend requirement for the preferred stock is \$350. Dividing the net income of \$47,750, by this figure yields approximately 136.4, which means that the dividend requirement of the preferred stock has been earned more than 136 times over. This ratio is so high primarily because Typical has only a relatively small amount of preferred stock outstanding.

EARNINGS PER COMMON SHARE

A buyer of common stock is often more concerned with the stock's earnings per share than with its dividend. This is because earnings usually influence stock market prices. Although the income statement separates earnings per share before and after the effect of extraordinary items, the remainder of this presentation will only consider net income per common share (net income after extraordinary item). In Typical's case, the income statement does not show income available for common stock, so it must be calculated as follows: Typical's capital structure is a very simple one, comprised of common and preferred stock. As such, the earnings per share computation above will suffice under this scenario. However, if the capital structure is more complex and contains securities that are convertible into **common stock, options, warrants** or **contingently issuable shares**, the calculation requires modification. (Options and warrants each give the holder the right to buy securities at a specified price. Contingently issuable shares are shares of stock whose issuance depends on the occurrence of certain events.) In fact, two separate calculations are required. This is called dual presentation. The calculations are basic and diluted earnings per common share.

THE INCOME STATEMENT

As of December 15, 1997, as per Financial Accounting Standard 128, publicly traded companies are required to report both forms of earnings per share: basic earnings per share and diluted earnings per share. This new standard replaced APB 15, making simple, primary and fully diluted earnings per share obsolete. FAS 128 also makes the calculation of earnings per share identical under U.S. and international accounting standards.

Basic Earnings per Common Share

This is determined by dividing the earnings available to common shareholders for the year or the appropriate period by the average number of shares of common stock outstanding during the year.

The average calculation is simply the arithmetic mean of the shares outstanding, on a pro rata basis, for the reporting period. Unexercised stock options, convertible securities and contingently issuable shares are NOT included in the basic earnings per share calculation.

Suppose, for example, that Complex Capital Corp. has \$300,000 in net income available to common shareholders and 100,000 average common shares outstanding for the year. Basic earnings per share would be \$3.00 (\$300,000/100,000).

DILUTED EARNINGS PER COMMON SHARE

Diluted earnings per share is determined by dividing the *adjusted* earnings available

to common shareholders for the year (or the period) by the average number of common and *potential* common shares outstanding, if such potential common shares are dilutive. **Dilution** occurs when earnings per share decreases or loss per share increases.

The “adjustments” to earnings include:

- Dividends on convertible preferred stock
- After-tax interest expense on convertible debt
- Effect of the change in earnings from other expenses (such as profit-sharing expense rising due to the increased income from the reduction of interest expense from the assumed conversion of convertible debt)

The “potential” common shares consist of other securities and contractual arrangements that may result in the issuance of common stock in the future, such as:

- Options or warrants
- Convertible securities
- Contingent stock arrangements

Convertible securities can be exchanged or converted into common shares. Examples are convertible preferred stock, convertible bonds and the like. Such securities are deemed to be only one step short of common stock. Their value stems in large part from the value of the common to which they relate.

| | |
|---|------------------------|
| 45 Net Income | \$47,750 |
| Less: dividend requirement on preferred stock | <u>(350)</u> |
| Net income available for common stock | <u>\$47,400</u> |

(Actual Amounts Used)

Net income per common share:

$$\frac{\$47,400,000 \text{ Net income available for the common stock}}{14,750,000 \text{ Average number of outstanding common shares}^*} = \mathbf{\$3.21}$$

*Shares outstanding at January 1 (14,500,000), plus shares outstanding at December 31 (15,000,000), = 29,500,000, divided by 2 = 14,750,000 average shares outstanding for the year.

Convertible preferred stock and convertible bonds offer their holders some choices. A holder can elect either (1) a return at the specified dividend or interest

THE INCOME STATEMENT

rate, or (2) conversion into common stock and participation in market appreciation and dividends resulting from increased earnings on the common stock. However, the securities don't have to be actually converted to common stock for them to be called "potential common shares" because they enable holders—in certain circumstances—to cause an increase in the number of common shares by exercising, exchanging or converting.

Each issue of potential common shares must be considered separately in sequence from the *most* dilutive (lowering earnings per share the most) to the *least* dilutive by examining the marginal earnings per share impact. This is known as **antidilution sequencing**. When calculating diluted earnings per share, first compare the impact of the most dilutive security to basic earnings per share. If a potential common share is antidilutive (therefore raising earnings per share), that security should NOT be included in the diluted earnings per share calculation. Because antidilutive securities are not included in the diluted calculation, diluted earnings per share must always be less than, or equal to, basic earnings per share. Diluted earnings per share are usually less than basic earnings per share due to the dilutive effects of potential common shares.

Options and warrants are the most common forms of potential common shares. As stated earlier, options and warrants each give the holder the right to buy securities at a specified price, known as the "exercise price" or "strike price." Let's examine an example of the dilution from the assumed conversion of options. The **Treasury Stock Method** is a method of calculating the effect on earnings per

share from stock options. All of the proceeds from the conversion of the in-the-money (current share price is greater than the exercise price) options are used to repurchase common shares at the *average* market price for the period.

For example, suppose the same Complex Capital Corp. used above also has 10,000 stock options outstanding with an average strike price of \$20 per share. The average share price for the year was \$50. The \$200,000 in option proceeds (10,000 options x \$20 average exercise price) is assumed to repurchase common shares at \$50 per share, therefore reducing common shares by 4,000 (\$200,000/\$50). The net dilutive effects of the options would be an *increase* in 6,000 common shares (10,000 options less 4,000 repurchased), assuming the hypothetical conversion of the in-the-money options at the average share price for the period under the Treasury Stock Method. Therefore, the earnings per share would be diluted to \$2.83 from the net effect of options (\$300,000 in net income/106,000 common shares, including the net 6,000 options).

Let us now further examine the diluted earnings per share calculation. Suppose the following financial information for the same Complex Capital Corp. as above:

- \$300,000 net income available to common shareholders
- 100,000 average common shares outstanding
- 10,000 stock options with an average strike price of \$20
- Average share price for the year of \$50
- Convertible bonds with a par value of \$1,000,000, 6% interest rate, and a conversion ratio of 20 common shares for every \$1,000 bond

THE INCOME STATEMENT

The basic earnings per share are simply \$300,000 in net income divided by 100,000 average common shares, or \$3.00. The effect of options lowered earnings per share to \$2.83. Let us now examine the effects of the potential common shares from the convertible bonds.

If the 1,000 bonds were converted into common shares, there would be another 20,000 common shares (1,000 bonds x 20). But converting the bonds would save the \$60,000 in interest payments (\$1,000,000 x 6%), less the tax deduction of \$24,000 on the interest expense. Therefore, the conversion of the bonds would increase net income available to common shareholders by \$36,000 (\$60,000 in interest expense less the \$24,000 tax deduction).

Adjustments to net income assuming conversion of the bonds:

| | |
|---|-----------------|
| Net Income available to common | \$300,000 |
| Plus: interest expense | 60,000 |
| Less: tax deduction on interest expense | <u>(24,000)</u> |
| Adjusted net income | \$336,000 |

Additional common shares assuming conversion of the stock options and the bonds:

| | |
|--|----------------|
| Common shares outstanding | 100,000 |
| Plus: options | 10,000 |
| Less: assumed shares repurchased under Treasury Stock Method | <u>(4,000)</u> |
| Plus: commons shares from the conversion of the bonds | <u>20,000</u> |
| Adjusted common shares | 126,000 |

Diluted earnings per share calculation:

| | |
|------------------------------|-----------|
| Adjusted net income | \$336,000 |
| Adjusted common shares | 126,000 |
| = Diluted earnings per share | \$2.67 |

Complex Capital Corp. would report both the basic and diluted numbers: Basic earnings per share of \$3.00 and diluted earnings per share of \$2.67. In most analyses, the diluted number is the most significant figure. This reflects the dilution from all potential common shares. In fact, research earnings per share estimates are generally given as the expected *diluted* earnings per share of the company.

PRICE-EARNINGS RATIO

Both the price and the return on common stock vary with a multitude of factors. One such factor is the relationship that exists between the earnings per share and the market price. It is called the **price-earnings ratio** (abbreviated P/E ratio).

This is how the P/E ratio is calculated. If a stock is selling at \$25 per share and earning \$2 per share annually, its price-earnings ratio is 12.5-to-1, usually shortened to 12.5. Put another way, the stock is said to be selling at 12.5 times earnings. If the stock should rise to \$40, the P/E ratio would be 20, or 20 times earnings. Or, if the stock drops to \$12, the P/E ratio would be 6, or six times earnings.

For Typical, which has no "potential common shares," net income per common share was calculated at \$3.21. If the stock were selling at \$33, the P/E ratio would be 10.3. This figure would be used to compare this stock over a period of years to itself and/or to other similar stocks.

This means that Typical Manufacturing com-

THE INCOME STATEMENT

P/E ratio:

$$\begin{array}{r} \$33 \text{ Market price} \\ 49 \text{ } \$3.21 \text{ Earnings per share} \end{array} = \mathbf{10.3: 1} \quad \text{or } \mathbf{10.3 \text{ times earnings}}$$

mon stock is selling at approximately 10.3 times earnings. Last year, Typical earned \$2.77 per share. Assume that its stock sold at the same P/E ratio then. This means that a share of Typical was selling for about \$28.50, and anyone who bought Typical then would be satisfied now. Just remember,

in the real world investors can never be certain that any stock will keep its same P/E ratio from year to year. The historical P/E multiple is a guide, not a guarantee.

In general, a high P/E multiple, when compared with other companies in the same industry, means that investors have confidence in the company's ability to produce higher future profits.

THE STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

This statement analyzes the changes from year-to-year in each component of shareholders' equity. It shows that during the year, Typical issued additional common stock at a price above par. It also shows that Typical experienced a foreign currency translation gain and an unrealized gain on investments classified as "available-for-sale." The other components of equity, with the exception of retained earnings (see the paragraph below) remained the same.

Retained earnings reflects the cumulative earnings that the company has invested for future growth. The statement of changes in shareholders' equity shows that retained earnings increased by net income less dividends on preferred and common stock. Since net income has already been analyzed, dividends will now be examined.

DIVIDENDS

Dividends on common stock vary with the company. They do not enter into the determination of net income;

nor are they deductible for tax purposes. Common shareholders were paid \$18,000 in dividends this year. Since the balance sheet shows that Typical has 15,000,000 shares outstanding, the first thing to be learned here may be an important point to some potential investors—the dividend per share.

Dividend per share:

(Actual amount used)

$$\begin{array}{r} \$18,000,000 \text{ Common stock dividends} \\ 15,000,000 \text{ Common shares outstanding} \end{array} = \mathbf{\$1.20}$$

Once the dividend per share is known, it is easy to go on to the next step: computing the **dividend payout percentage**. This is simply the percentage of earnings per share paid to shareholders.

Dividend payout percentage:

$$\begin{array}{r} \$1.20 \text{ Dividend per common share} \\ 48 \text{ } \$3.21 \text{ Net income per common share} \end{array} = \mathbf{37\%}$$

THE STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

Another statistic of great interest to many investors and analysts is the **dividend yield**, a percentage providing an estimate of the return per share on a given class of stock. Here, for example, the **common dividend yield** would be of great interest. This indicates the percentage return that the annual common dividend provides based on the market price of the common stock. This is derived by dividing the annual common dividend, in this case \$1.20, by the market price of the common stock, earlier determined to be \$33 per share. This provides a “common dividend yield” of 3.6%, which is quite respectable in today’s market.

Dividend yield:

$$\frac{\$1.20 \text{ Dividend per common share}}{\$33 \text{ Market price of the common stock}} = 3.6\%$$

Of course, the dividends on the \$5.83 preferred stock will not change from year-to-year. The word “cumulative” in the balance-sheet description indicates that if Typical’s management didn’t pay a dividend on its preferred stock, then the \$5.83 payment for that year would accumulate. It would have to be paid to preferred shareholders before any dividends could ever be declared again on the common stock. That’s why preferred stock is called “preferred”; it gets any dividend money first. Convertible bonds and convertible preferred stock were discussed earlier. However, Typical Manufacturing doesn’t have any convertible securities outstanding, so these are of no further interest right now. Chances are its 60,000 shares of preferred stock—with a par value of \$100 each—were issued to family members.

During the year, Typical Manufacturing has added \$29,400 to its retained earnings

after paying dividends totaling \$18,350. Even if Typical has some lean years in the future, it has plenty of retained earnings from which to keep on declaring those \$5.83 dividends on the preferred stock and \$1.20 dividends on the common stock.

There is one danger in having a lot of retained earnings. It could attract another company, Great Giant Computers & Electronics for instance, to buy up enough of Typical’s common to vote out the current management. Then Great Giant might merge Typical into itself. Where would Great Giant get the money to buy Typical stock? By issuing new shares of its own stock, perhaps. And where would Great Giant get the money to pay the dividends on all that new stock of its own? The funds would come from Typical’s retained earnings. So Typical’s management has an obligation to its shareholders—to make sure that its retained earnings are put to work to increase their total wealth. Otherwise, the shareholders might cooperate with Great Giant if it conducted a raid on Typical.

| | | |
|----|-------------------|------------------|
| 27 | Retained earnings | \$249,000 |
|----|-------------------|------------------|

RETURN ON EQUITY

Seeing how hard money works, of course, is one of the most popular measures that investors use to come up with individual judgments on how much they think a certain stock ought to be worth. The market itself—the sum of all buyers and sellers—makes the real decision. But the investors often try to make their own decision on whether they want to invest at the market’s price or wait. Most investors look for Typical’s **return on equity** (also known as “ROE”), which shows how hard shareholders’ equity in Typical is working.

THE STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY



How can an investor compute Typical's ROE? To arrive at this figure, an investor would look at the balance sheet and compute the average common shareholders' equity for the year in order to calculate how much Typical made on it. In making this calculation, the investor uses only the amount of net profit after the dividends have been paid on the preferred stock. For Typical Manufacturing, that means \$47,750 net profit minus \$350. (See the Calculation below.)

For every dollar of shareholders' equity, Typical made about 15¢. Is that good? Well, a 15% return to shareholders is about twice the return Typical would have received had it invested instead in quality corporate bonds. It is also several times what it would have received from a savings account. The point is that in considering whether to put money to work in

Typical's stock, an investor really needs to do two things. First, he or she needs to compare Typical's 14.8% to returns from Typical's business competitors. Second, he or she needs to compare Typical's return to the potential return that could be achieved from other types of investment, such as certificates of deposit, corporate bonds, real estate or other common stocks.

Just remember, that 14.8% is what Typical itself makes. By no means is it what an investor will make in dividends on Typical's stock. What ROE really reveals is whether Typical Manufacturing is relatively attractive as an enterprise. An investor can only hope that this attractiveness will translate into demand for Typical's stock and will be reflected in its market price.

Calculation:

$$\begin{array}{r} \$47,750 \quad \text{Net income less } \$350 \text{ preferred stock dividend} \\ \hline \$325,825 \text{ Average 19X9 stockholders' equity* less } \$6,000 \text{ preferred stock value} \\ \hline \$47,400 \quad = \quad \mathbf{14.8\% \text{ Return on equity}} \\ \$319,825 \end{array}$$

* Stockholders' equity at January 1 (\$305,600), plus stockholders' equity at December 31 (\$346,050) = \$651,650, divided by 2 = \$325,825 average 19X9 stockholders' equity.

THE STATEMENT OF CASH FLOWS

One more statement needs to be analyzed in order to get the full picture of Typical's financial status. The statement of cash flows presents the changes in cash resulting from business activities. Cash-flow analysis is necessary to make proper investing decisions and to maintain operations.

Cash flows, although related to net income, are not equivalent to it. This is because of the **accrual method of accounting**. Generally, under accrual accounting, a transaction is recognized on the income statement when the earnings process is completed, that is, when the goods and/or services have been delivered or performed or an expense has been incurred. This does not necessarily coincide with the time that cash is exchanged. For example, cash received from merchandise sales often lags behind the time when goods are delivered to customers. Generally, however, when the goods are shipped (service performed), the sale is recorded on the income statement and a related receivable is recorded on the balance sheet.

Cash flows are also separated by business activity. The business activity classifications presented on the statement include financing activities, investing activities and

operating activities. Financing and investing activities will be discussed first.

Financing activities include those activities relating to the receipt and repayment of funds provided by creditors and investors. These activities include the issuance of debt or equity securities, the repayment of debt, and distribution of dividends. Investing activities include those activities relating to asset acquisition or disposal.

Operating activities basically include all activities not classified as either financing or investing activities. They involve the company's primary business activities, for example, the production and delivery of goods and services. They reflect the cash effects of transactions, which are included in the determination of net income.

Since many items enter into the determination of net income, the indirect method is used to determine the cash provided by or used for operating activities. This method requires adjusting net income to reconcile it to cash flows from operating activities. Common examples of cash flows from operating activities are: Cash collected from customers; interest received and paid; dividends received; salary; insurance; and tax payments.



ADDITIONAL DISCLOSURES AND AUDIT REPORTS



Watch Those Notes

The annual reports of many companies contain this or a similar statement: “See the Accompanying Notes to the Consolidated Financial Statements” or “The Accompanying Notes are an Integral Part of the Financial Statements.” The reason is that the financial statements themselves simply report the balances in the various accounts. Because there is no room on the face of the statements for a complete and adequate discussion relating to those balances, additional required disclosures are provided in the notes.

Some examples of appropriate footnote data are:

- **Description of the company's policies**—disclosure of the company's policies for depreciation, amortization, consolidation, foreign currency translation, earnings per share, etc.
- **Inventory valuation method**—indicates which method is used to determine the cost of goods sold on the income statement and on the balance sheet such as **last-in, first-out (LIFO)**, **first-in, first-out (FIFO)** or average cost. LIFO means that the costs on the income statement reflect the cost of inventories purchased or produced most recently. FIFO means the income statement reflects the cost of the oldest inventories. This is an extremely important consideration because the LIFO method reflects the most current costs in the income statement and does not overstate profits during inflationary times, while the FIFO valuation does. If not shown on the balance sheet, the composition of the inventories by raw materials, work-in-process, finished goods and supplies should be presented.
- **Asset impairment**—disclosure of details about impaired assets or assets to be disposed of.
- **Investments**—information about debt and equity securities classified as “trading,” “available-for-sale” or “held-to-maturity.”
- **Income tax provision**—the breakdown by current and deferred taxes and its composition into federal, state, local and foreign tax, accompanied by a reconciliation from the statutory income tax rate to the effective tax rate for the company.
- **Changes in accounting policy**—description of changes in accounting policy due to new accounting rules.
- **Nonrecurring items**—details regarding nonrecurring items such as pension-plan terminations or acquisitions/dispositions of significant business units.
- **Employment and retirement programs**—details regarding employment contracts, profit-sharing, pension and retirement plans and postretirement and postemployment benefits other than pensions.
- **Stock options**—details about stock options granted to officers and employees.
- **Long-term leases**—disclosure of lease obligations on assets and facilities on a per-year basis for the next several years and total lease obligations over the remaining lease period.
- **Long-term debt**—details regarding the issuance and maturities of long-term debt.
- **Contingent liabilities**—disclosures relating to potential or pending claims or lawsuits that might affect the company.

ADDITIONAL DISCLOSURES AND AUDIT REPORTS

- **Future contractual commitments**—terms of contracts in force that will affect future periods.
- **Regulations/restrictions**—description of regulatory requirements and dividend or other restrictions.
- **Off-balance sheet credit and market risks**—details of off-balance-sheet credit and market risk associated with certain financial instruments. This includes interest rate swaps, forward and futures contracts and options contracts (often referred to as derivatives). “Off-balance-sheet risk” is defined as potential for loss over and above the amount recorded on the balance sheet.
- **Fair value of financial instruments carried at cost**—disclosure of fair market values of instruments carried at cost including long-term debt and off-balance-sheet instruments, such as swaps and options.
- **Segment sales, operating profits and identifiable assets**—information on each industry segment that accounts for more than 10% of a company’s sales, operating profits and/or assets. Multi-national corporations must also show sales and identifiable assets for each significant geographic area where sales or assets exceed 10% of the related consolidated amounts.

Most people do not like to read footnotes because they are complicated and are rarely written in “plain English.” This is unfortunate because the notes are very informative. Moreover, they can reveal many critical and fascinating sidelights to the financial story.

INDEPENDENT AUDITS

The report from the independent auditors is often referred to as the auditor’s opinion, and is printed in the annual report. It should say three things, namely that:

1. The audit steps taken to verify the financial statements meet the auditing profession’s approved standards of practice.
2. The financial statements prepared by management are management’s responsibility and follow generally accepted accounting principles.
3. There is no material misstatement.

As a result, when the annual report contains financial statements accompanied by an unqualified (often referred to as “clean”) opinion from independent auditors, there is added assurance that the figures can be relied upon as being fairly presented.

However, if the independent auditor’s report contains the qualifying words “except for,” the reader should be on the alert, cautious and questioning. The reader should investigate the reason(s) behind such qualification(s), which should be summarily explained in that report and referenced to the footnotes. In addition, while the auditor(s) may not qualify the opinion, a separate paragraph, usually a fourth, may be inserted to emphasize an important item. Investors should carefully consider any matter so emphasized.



THE LONG VIEW



It cannot be emphasized too strongly that company reports must be compared if they are to be useful. They can be compared to other dates and time periods, reports of other companies and to industry averages. If desired, they can even be compared to broader economic factors. But most of all, one company's annual activities can be effectively compared to the same firm's results from other years.

At one time this was done by keeping a file of old annual reports. Now, many corporations include a 5- or 10-year summary of their financial highlights in each year's annual report. This provides the investing public with information about a decade of performance. That is why Typical Manufacturing has included a 10-year summary in its annual report. Although the summary is not a part of the state-

ments verified for by the auditors, it is there for investors to read. A 10-year summary can show the reader:

- The trend and consistency of revenues.
- The trend of earnings, particularly in relation to sales.
- The trend of net earnings as a percentage of sales.
- The trend of return on equity.
- Net earnings per common share.
- Dividends and dividend trends.

Other companies may include changes in net worth; book value per share; capital expenditures for plant and machinery; long-term debt; capital stock changes due to stock dividends and splits; number of

Ten-Year Financial Summary

| | <u>19X9</u> | <u>19X8</u> | <u>19X7</u> | <u>19X6</u> |
|---|-------------|-------------|-------------|-------------|
| Net sales | \$765,050 | \$725,000 | \$690,000 | \$660,000 |
| Income before income taxes and extraordinary loss | 94,196 | 66,750 | 59,750 | 54,750 |
| Extraordinary loss | (5,000) | - | - | - |
| Net income | 47,750 | 40,500 | 37,700 | 33,650 |
| Earnings per share before extraordinary loss | 3.55 | 2.77 | 2.57 | 2.28 |
| Net income per share | 3.21 | 2.77 | 2.57 | 2.28 |
| Dividend per common share | 1.20 | 1.20 | 1.20 | 1.00 |
| Working capital | 229,800 | 199,000 | 218,000 | 223,000 |
| Net plant and equipment | 260,000 | 249,600 | 205,000 | 188,000 |
| Long-term debt | 130,000 | 136,000 | 136,000 | 6,000 |
| Preferred stock | 6,000 | 6,000 | 6,000 | 6,000 |
| Common shareholders' equity | 340,050 | 299,600 | 275,800 | 254,700 |
| Book value per common share | 22.54 | 20.52 | 18.39 | 16.98 |

Note: Dollars in thousands, except per-share amounts.

THE LONG VIEW

employees; number of shareholders; and number of outlets. Where appropriate, the summary may also include information on foreign subsidiaries and the extent to which foreign operations have been embodied in the company's financial report.

All of this is really important because of one central point: Investors and potential investors not only are trying to find out how Typical is doing now, but they also want to try to predict how Typical and its stock will perform in the future.

SELECTING STOCKS

Given the items explored in this booklet, Typical Manufacturing appears to be a healthy concern. Since Typical is fictional, financial consultants can't recommend the purchase of shares of its stock. When investing money in real stocks, however, please remember this: *Selecting securities for investment requires the careful study of factors other than those included in the basic financial statements and related footnotes. The economics of the country and the particular*

industry must be considered. The management of the company must be studied and its plans for the future assessed. Information about these "other things" is rarely contained in the financial report. These other facts must be gleaned from the press or the financial services provided by some research organization. Merrill Lynch's ongoing research monitors this type of data and the available facts needed to help individuals and businesses become informed investors.

| 19X5 | 19X4 | 19X3 | 19X2 | 19X1 | 19X0 |
|-----------|-----------|-----------|-----------|-----------|-----------|
| \$600,000 | \$520,000 | \$500,000 | \$450,000 | \$350,000 | \$300,000 |
| 50,400 | 42,000 | 45,800 | 40,500 | 34,350 | 29,500 |
| — | — | — | — | — | — |
| 29,850 | 27,300 | 30,360 | 25,975 | 21,000 | 18,100 |
| 2.00 | 1.83 | 2.20 | 1.93 | 1.69 | 1.43 |
| 2.00 | 1.83 | 2.20 | 1.93 | 1.69 | 1.43 |
| 1.00 | 1.00 | 1.00 | .80 | .80 | .80 |
| 211,000 | 178,000 | 136,000 | 111,000 | 86,000 | 96,000 |
| 184,300 | 187,500 | 161,600 | 125,600 | 92,500 | 87,600 |
| 6,000 | — | — | — | — | — |
| 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| 238,100 | 220,500 | 203,250 | 166,000 | 133,800 | 128,000 |
| 15.87 | 14.70 | 13.55 | 11.07 | 8.92 | 8.53 |

GLOSSARY OF SELECTED TERMS

Page numbers in parentheses are page references in this booklet where the terms are first introduced or where additional information about the terms can be found.

Accounts Payable (Page 15).

Amounts owed to creditors for goods and services bought on credit; generally, they must be paid within 90 days.

Accounts Receivable (Page 10).

Amounts due a business from customers for goods and services sold on credit; generally they must be paid within 90 days.

Accrual Method of Accounting (Page 39).

Method of accounting that recognizes revenue when earned and expenses when incurred in order to appropriately match income with expenses in an accounting period.

Accrued Expenses (Page 15).

The obligation to pay business expenses that were incurred, but not paid, during an accounting period.

Accumulated Amortization (Page 14).

A deduction from intangible assets to show the total amount of periodic charges to income over the estimated useful lives of those assets. Also called *Reserve for Amortization*.

Accumulated Depreciation (Page 13).

A deduction from fixed assets to show the total amount of periodic charges to income over the estimated useful lives of those assets. Also called *Reserve for Depreciation*.

Additional Paid-in Capital (Page 19).

The total excess of the shareholders' investment in the company over the par or stated value of its common and preferred stock. Also called *Paid-in Capital*.

American Institute of Certified Public Accountants (AICPA) (Page 2).

The major professional public accounting group that sets standards of practice for Certified Public Accountants.

Allowance for Doubtful Accounts (Page 10).

Amounts deducted from the total accounts receivable balance to recognize that some customers will

not pay what they owe. Also called *Provision for Doubtful Accounts*, *Reserve for Doubtful Accounts* or *Bad Debt Reserve*.

Amortization (Page 14).

Periodic charges to income to recognize the distribution of the cost of the company's intangible assets over the estimated useful lives of those assets.

Antidilution (to Earnings per Common Share) (Page 35).

An increase in earnings (or decrease in loss) per common share that assumes that convertible securities were converted, stock options and warrants were exercised or other shares were issued upon satisfaction of certain conditions. When antidilution occurs, the per-share amount that it produces is not used as the reported per-share amount.

Antidilution Sequencing (Pages 34).

Examination of potential common shares by order of most dilutive to least dilutive. If the security lowers earnings per share relative to the base earnings per share, calculate the earnings per share assuming the conversion of the security. Securities that are antidilutive are not included in the diluted earnings per share calculation.

Asset (Pages 8, 9-14).

Something owned by and having continuing value to its owner or a business.

Audit (of Financial Statements) (Page 1).

A systematic examination of a company's financial statements to determine if the amounts and disclosures in the reports are fairly stated and follow generally accepted accounting principles.

Available-for-Sale Securities (Page 10).

Securities not classified as held-to-maturity or trading. They are carried at fair market value, with any changes in the value (less applicable taxes) reported in shareholders' equity in the balance sheet. When sold, any gain or loss will be realized and reported in the income statement.

Balance Sheet (Pages 1, 8-26).

A report showing the financial position or condition of a business at a given date. Also called *Statement of Financial Position* or *Statement of Financial Condition*.

Basic Earnings per Common Share (Page 33).

Income available to common shareholders for the period divided by the weighted-average number of common shares outstanding for the period.

Bonds (Page 18).

Formal, secured or unsecured debt obligations specifying interest and repayment terms.

Book Value per Share (Page 25).

The adjusted shareholders' equity for each class of stock divided by the number of shares of each such class.

Capitalization Ratio (Page 25).

The relationship that each security (debt or equity) bears to total debt and equity, less intangible assets, expressed as a ratio.

Cash and Cash Equivalents (Page 9).

Generally, bank accounts and currency on hand, and short-term, highly liquid securities with a maturity under 90 days, such as U.S. Treasury bills.

Cash Flows, Statement of (Pages 2, 39).

A report showing cash receipts and disbursements compiled and totaled by operating, investing and/or financing activities.

Certified Public Accountant (CPA) (Page 1).

Professional title granted to people who pass a comprehensive test on accounting, auditing and business law. CPAs usually perform audits of a company's financial statements.

Changes in Shareholders' Equity, Statement of (Pages 2, 36).

A report providing the details, by category, of all activity in all components of shareholders equity, for the period covered by the report.

Common Dividend Yield (Page 37).

Dividends paid on each share of common stock expressed as a percentage of the market price of those shares. See also *Dividend Yield*.

Common Stock (Pages 19, 33).

The par or stated value of the common stock (the basic ownership interest in a corporation) issued by a company as reported in its balance sheet.

Common Stock Ratio (Page 26).

The percentage that common stockholders' equity reduced by intangible assets bears to total tangible capitalization (the sum of shareholders' equity and long-term debt reduced by intangibles).

Compensatory Stock Options (Page 33).

See *Stock Options*.

Contingently Issuable Shares (Page 32).

Shares of stock the issuance of which depends on the occurrence of certain events.

Convertible Securities (Page 33).

A debt or equity security that may under certain circumstances be exchanged for or converted into another security, generally common stock.

Cost of Sales (Page 28).

The total cost to purchase and/or manufacture all of the company's products that were sold during a period.

CPA (Page 1).

See *Certified Public Accountant*.

Current Assets (Page 9).

Cash or other assets that will be converted to cash or consumed within the normal operating cycle, generally one year.

Current Liability (Page 15).

A liability that must be paid within the normal operating cycle, generally one year.

Current Portion of Long-Term Debt (Page 17).

The portion of long-term debt that is due within one year of the balance-sheet date.

Current Ratio (Page 22).

The relationship of current assets to current liabilities, expressed as a ratio.

Debentures (Page 18).

Formal, unsecured debt obligations (bonds or notes) that are backed

only by the general credit of the issuer rather than certain of its assets.

Debt Amortization (Page 10).

The practice of adjusting the original cost of a debt instrument as principal payments are received and any purchase discount or premium is written off to income over the life of the instrument.

Debt-to-Equity Ratio (Page 23).

The ratio of total debt (liabilities) to total shareholders' equity.

Deferred Charges (Page 13).

Expenditures for items that will benefit future periods beyond one year from the balance-sheet date.

Deferred Income Taxes (Page 17).

The obligation to pay income taxes in future years generally arising from transactions involving noncurrent assets and/or liabilities.

Depletion (Page 13).

The process of recognizing, by a charge against income, the reduction in the cost of a natural resource (minerals, oil, gas) due to its withdrawal and use or sale.

Depreciation (Page 12).

Periodic charges to income to recognize the cost of "wear and tear" of a company's fixed assets over the estimated useful lives of those assets.

Diluted Earnings per Common Share (page 33)

The amount of current earnings or loss per share reflecting the maximum dilution (that is, the negative impact) assuming the issuance of all potentially dilutive common shares.

Dilution (Page 33).

The reduction in common earnings per share (or increase in loss) if convertible securities are converted, stock options and warrants are exercised or other shares are issued.

Dividend Payout Percentage (Page 36).

Dividends per share divided by earnings per share, expressed as a percentage.

Dividend Yield (Page 37).

The dividend paid on each share of each class of stock as a percentage of the market price of those shares. See also *Common Dividend Yield*.

Dividends (Pages 2, 36).

Payments, generally declared by the Board of Directors, from retained earnings to shareholders

to compensate them for their investment.

Earnings per Common Share (Page 33).

Net income reduced by preferred dividends and divided by the average outstanding number of common shares during the accounting period.

Estimated Useful Life (Page 12).

The period of time over which the owner of an asset (physical or intangible) estimates that that asset will continue to be of productive use or have continuing value.

Extraordinary Items (Page 29).

Nonoperating items that are both unusual and occur infrequently.

Fair Market Value (Page 9).

The amount at which an item could be exchanged between willing unrelated parties, other than in a forced liquidation. It is usually the quoted market price when a market exists for the item.

Financial Accounting Standards Board (FASB) (Page 2).

The independent, private-sector organization designated to establish standards for financial accounting and reporting. It is the body that issues GAAP, generally accepted accounting principles.

FIFO (Page 40).

Acronym for First-In, First-Out. See *First-In, First-Out*.

Financial Leverage (Page 32).

See *Leverage (Financial)*.

Financial Statement Ratio (Page 22).

A mathematical relationship between two or more amounts reported in financial statements. Financial statement ratios can provide relative measures of, and insights into, the health, condition and performance of a company.

First-In, First-Out (Page 40).

An inventory-costing method that states inventory at its most current cost while charging the cost of sales in the order the inventory was accumulated.

Fixed Assets (Page 12).

Another term for the property, plant and equipment used in the operation of a business.

Footnotes (Pages 2, 40).

Additional details and disclosures about the figures and information contained in a company's financial statements.

Foreign Currency Translation Adjustments (Page 21).

The cumulative adjustment, reported in the Equity section of the balance sheet, resulting from the translation of a foreign subsidiary's local currency financial statements into the currency of the parent company.

Generally Accepted Accounting Principles (GAAP) (Page 1).

The rules and standards followed in recording transactions and in preparing financial statements.

Goodwill (Page 13).

An intangible asset that represents the excess of the amount paid for an acquired company over the fair market value of the net assets of that company. Basically, it is the value of the name and reputation of the acquired company.

Gross Margin (Page 28).

The excess of sales over cost of sales or the profit from sales before considering operating, general and other expenses. Also called *Gross Profit* or *Product Profit*.

Gross Margin Percentage (Page 28).

Gross margin expressed as a percentage of sales. Also called *Gross Profit Percentage* or *Product Profit Percentage*.

Held-to-Maturity Securities (Page 10).

Debt securities that the holder/owner has the ability and intent to hold to maturity. They are carried at amortized cost (original cost less principal payments and premium or discount amortization).

Highly Leveraged (Page 32).

A company with a large proportion of bonds and preferred stock outstanding relative to the amount of common stock.

Impairment (Permanent) of Loans (Investments) (Page 14).

The probability that the lender (investor) will not collect all amounts in accordance with the loan agreement.

Income Statement (Pages 2, 26-36).

Report summarizing the revenues and expenses and reporting the net income (or loss) of a business for an entire accounting period. Also called the *Statement of Earnings*, *Statement of Profit and Loss*, *P&L* or *Operating Statement*.

Income Taxes (Page 29).

The amount of income tax expense reported for the period. It is often referred to as the *Tax Provision* or *Provision for Income Taxes*.

Income Taxes Payable (Page 15).

The obligation to pay federal, foreign, state and local income taxes that are due within one year from the balance-sheet date.

Intangible Assets (Page 13).

Nonphysical assets with continuing value, such as goodwill, copyrights, trademarks and franchises.

Interest (Page 29).

Payments by borrowers of funds to compensate lenders for the use of their funds.

Interest Coverage (Page 31).

The number of times the annual interest on debt obligations is covered by income for the year before considering interest on the debt obligations and income taxes.

Inventory (Pages 10-11).

The cost of goods on hand that were purchased and/or manufactured or that are being manufactured for sale to customers.

Inventory Turnover (Pages 23-24).

The number of times the average inventory is sold during the year.

Investment Securities (Page 14).

Securities (debt or equity) held for strategic purposes and/or long-term appreciation or income.

Last-In, First-Out (LIFO) (Page 40).

An inventory-costing method that states inventory at its earliest cost while charging cost of sales at its latest cost (in the reverse order that the inventory was accumulated).

Leverage (Financial) (Page 32).

Relates a company's long-term debt to its capital structure. Also, it is the practice of obtaining capital using borrowed funds or preferred stock, rather than common stock.

Liability (Pages 8, 16-18).

An obligation to pay for assets or goods or services acquired or to repay borrowed funds.

LIFO (Page 40).

Acronym for Last-In, First-Out. See *Last-In, First-Out*.

Long-Term Debt (Page 18).

Borrowed funds due after one year from the balance sheet date. See *Current Portion of Long-Term Debt* and *Other Long-Term Debt*.

Long-Term Liabilities (Page 17).

Obligations that are due after one year from the balance-sheet date.

Lower of Cost or Market Rule. (Page 11).

The rule is that inventory should be valued at its cost or market value, whichever is lower. The intent is to provide a conservative figure in valuing a company's inventory. See also *Market Value*.

Management Discussion and Analysis (MD&A) (Page 1).

An SEC-required report in which management provides selected financial data to highlight significant trends in the company's financial position or operating results.

Market Price (Page 11).

The price at which a good can be sold in the open market. See also *Fair Market Value*.

Market Value (Pages 9, 11).

See *Fair Market Value*.

Marketable Securities (Pages 9-10).

Readily liquid securities (debt or equity) that can be converted into cash on very short notice.

Mortgage Bonds (Page 18).

Formal, secured debt obligations that are backed by certain specific assets of the issuer.

Net Asset Value (Page 24).

See *Book Value*.

Net Book Value (Page 24).

See *Book Value*.

Net Income/Loss (Page 29).

The final result of all revenue and expense items for the period. Also called Net Profit or Loss. Often referred to as the "Bottom Line."

Net of Taxes (Page 10).

Term meaning the value or amount has been adjusted for the effects of applicable taxes.

Net Profit Ratio (Page 31).

Net income expressed as a percentage of sales.

Net Quick Assets (Page 23).

The excess of quick assets over current liabilities.

Notes Payable (Page 15).

Short- or long-term obligation, evidenced by a formal borrowing agreement (such as a promissory note), to repay borrowed funds.

Operating Income or Loss (Page 28).

The profit or loss generated by a company's normal, recurring operating activities before considering nonoperating items, income taxes, gains or losses from disposals of a segment of the business and extraordinary items.

Operating Margin (Page 30).

Operating income expressed as a percentage of sales.

Other Long-Term Debt (Page 18).

All debt due after one year from the balance-sheet date that is not reported elsewhere in the balance sheet.

Paid-in Capital.

See *Additional Paid-in Capital*.

Par Value (Page 19).

The nominal or face value of a security assigned by the issuer for balance-sheet reporting. It has no relation to market value.

Permanent Impairment (Page 14).

See *Impairment (Permanent) of Loan (Investments)*.

Preferred Dividend Coverage (Page 32).

The number of times the preferred dividend is covered (earned) by net income.

Preferred Stock (Page 19).

An equity security that entitles its holders to certain preferences over common shareholders, such as dividends, liquidation value and convertibility into other securities, etc.

Preferred Stock Ratio (Page 26).

The percentage that preferred stockholders' equity bears to total tangible capitalization (the sum of shareholders' equity and long-term debt reduced by intangibles).

Prepaid Expenses (Page 11).

Payments in advance for goods or services, which will be consumed and deducted from income during the future, normal operating cycle, generally one year.

Price-Earnings Ratio (Page 35).

The comparison of the market price of a share of stock to the earnings per share of that stock, expressed as a ratio. Also called the *P/E ratio*.

Property, Plant and Equipment (Page 12).

Assets not intended for sale that are used to manufacture, display, warehouse and transport the company's products and house its employees. See also *Fixed Assets*.

Quick Assets (Page 22).

Assets that can be converted to cash quickly.

Quick Assets Ratio (Page 23).

The relationship between quick assets and current liabilities, expressed as a ratio.

Retained Earnings (Page 20).

The total profit or loss of the company less the total of all dividends paid, since the company's startup.

Return on Equity (ROE) (Page 37).

Net income for the period expressed as percentage of average shareholders' equity for the period.

Securities and Exchange Commission (SEC) (Page 2).

The main securities regulatory authority in the U.S.

Shareholders' Equity (Pages 8, 18-21).

The total of shareholders' investments in the company and total profits or losses since the start-up of the company, less all dividends and/or capital distributions, unrealized gain on available-for-sales securities and any foreign currency translation adjustments since the company's start-up.

Stated Value (Page 19).

The nominal or face value of a security assigned by the issuer in lieu of par value for balance-sheet reporting. It has no relation to market value.

Statement of Cash Flows.

See *Cash Flows, Statement of*.

Statement of Changes in Shareholders' Equity.

See *Changes in Shareholders' Equity, Statement of*.

Stock Option, Compensatory (on Unissued Stock) (Page 33).

An agreement, usually between an issuer and its executives/employees, that grants the right to purchase securities, such as common stock, at a specified price. Options are common stock equivalents and may dilute earnings per common share.

Stock Option (Publicly Traded).*

A security bought and sold in the public securities markets that provides the holder the right, but not necessarily the obligation, to buy or sell a specified security in the quantity, at the amount, and during the time period specified in the option.

Trading Securities (Page 9).

Securities (debt or equity) bought and sold frequently, principally to generate short-term profits. They are carried at fair market value, with any changes in the value reported in income.

Treasury Stock (Page 21).

The total cost of any of the company's stock that has been repurchased or otherwise reacquired from shareholders and held in the company's treasury.

Treasury Stock Method (page 34).

A method to calculate the effect on earnings per share of stock options and warrants. All option proceeds from the assumed conversion of in-the-money options are assumed to be used to repurchase shares (that is, reacquired and held in the company's treasury) at the average stock price for the period.

Unrealized Gain/Loss (Page 21).

The difference between the cost (or previously reported fair market value) of an asset held at the balance sheet date and its fair market value at that date.

Warrant (Page 33).

A security, generally evidenced by a certificate, giving the holder the right to purchase securities, such as common stock, at a specified price. Warrants are common stock equivalents and may dilute earnings per common share.

Working Capital (Page 22).

The excess of current assets over current liabilities.

**Note: This definition is not found within this booklet. We have included the definition in the glossary only to help better define the differences between the two types of stock options.*

NOTES

NOTES

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INTRODUCTION

Known “from Wall Street to Main Street”—and worldwide—Merrill Lynch is a global leader in the financial services industry. As a public service, Merrill Lynch wants to share some of its expertise in, and knowledge of, financial reporting through this booklet.

We hope this booklet will serve as a valuable resource to help readers learn how to read and analyze a company’s annual report. Through it, readers can learn that an annual report is not just a jumble of numbers and mind-numbing data. Read with understanding and analytical insight, the numbers and data in an annual report can tell an interesting, meaningful and fascinating story.



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