

Understanding Financial Statements

By James K. Gentry

One of the major challenges facing reporters, corporate communicators and the public in general is understanding corporate financial statements. First, there is the math. And then there is the matter of all that unfamiliar jargon. What, exactly, is “free” cash, for example? If it’s “free,” give me some.

This tutorial is designed to give you an overview of the primary financial statements – the income statement, the balance sheet and the statement of cash flows – so that you can make sense of a public company’s financial documents and get a feel for the company’s condition.

If you have trouble the first few times you try to understand financial statements, don’t worry. That’s normal since the vocabulary is foreign to most of us. The more you read financial statements, the more comfortable you will become with the presentation and the better able you will be to interpret what the statements are telling you.

To get a good feel for the company, you should look at it within a much larger framework.

- Context. Put the company into a context that includes its industry, the economy, interest rates, the business cycle, etc. For example, the financial statements and ratios of retailers are vastly different from those of utilities.
- Trends. Look at the company’s own trends such as how it has performed over the last three, five or ten years. You might find that this year’s performance is much better, or worse, than the performance over the past few years. If so, you should find out why.
- Documents, especially those filed with the Securities and Exchange Commission. The 10-K, which is the SEC version of a company’s annual report, gives the definitive picture of the firm. You’ll find a vast amount of information there.
- Fourth, outsiders. This includes suppliers, customers, competitors, analysts, bankers, unions, regulators, etc.
- Fifth, insiders. This includes current executives, board members, managers and employees. Also include former executives, board members, managers and employees, all of whom might be a lot more willing to talk with you than individuals still with the company.

Public companies produce two types of numbers: unaudited and audited.

- Unaudited. Unaudited numbers sometimes are called management figures. They are produced for executives and managers for specific purposes, such as inventory control and cash flow projections.

- Audited. The numbers in a 10-K are audited. That means an independent auditing firm has reviewed the numbers to provide assurance that certain procedures have been followed so that the numbers conform to Generally Accepted Accounting Principles. Importantly, not all numbers that companies release to the public have been reviewed by outside auditors. The most important exception is the 10-Q or quarterly statement. If you write a story or press release based on information from a 10-Q, be sure to state that the numbers are unaudited.

In addition, two main types of people provide the numbers: accountants and Certified Public Accountants (CPAs).

- Accountants. Perform accounting and bookkeeping functions. May or may not have a degree in accounting.
- CPAs. Meet specified education and experience criteria, and pass a rigorous examination.

Most of the numbers in the financial statements don't stand alone. Each 10-K or annual report has numerous footnotes that amplify on the numbers. Many stories go unwritten because reporters ignore the footnotes. By contrast, investors such as the legendary Warren Buffet and top analysts dig deep into the footnotes to learn the company's real story.

Oversight of public companies

The Securities and Exchange Commission is the primary regulator of public companies. The SEC, which was created in the wake of the crash of 1929, sees its role as:

- Protecting investors by requiring companies to make public certain information through various filings.
- Maintaining a fair and orderly trading market.
- Maintaining investor confidence in the market.

The SEC requires filings by companies with more than \$10 million in assets whose securities are held by more than 500 owners. Many private companies with more than 500 shareholders or with public debt offerings also have to file. Mary Schapiro is the SEC chairman.

As a result of corporate fiascos such as Enron and WorldCom, the Sarbanes-Oxley Act of 2002 was enacted. SOX, as it is frequently called, is the most far-reaching change of securities laws since the New Deal era. The law radically redesigned federal regulations of public company governance and reporting obligations. It also significantly tightened accountability standards for directors and officers, securities analysts and legal counsel.

Another outgrowth of SOX was creation of the Public Company Accounting Oversight Board (PCAOB) as an independent board to oversee accounting practice and the reporting of corporate financials.

Public companies prepare their numbers in conformity with Generally Accepted Accounting Procedures (GAAP). These rules have evolved over time, and can be

vague and ambiguous. Public company accounting is dominated by the Big Four accounting firms. In order of revenue, they are PricewaterhouseCoopers, Deloitte Touche Tohatsu, Ernst & Young, and KPMG. Since the demise of Arthur Andersen, a second tier of firms such as Grant Thornton, RSM McGladrey and BDO Seidman has grown significantly.

The Income Statement

If you are not familiar with all of the terms below, buy a reference book or pop out to a website or two when you need definitions. The Dictionary of Finance and Investment Terms by Downes and Goodman (Barron's Educational Series) is an excellent desktop reference. For online information, you can access Investopedia, Morningstar, Finance.Yahoo, The Motley Fool and others.

So you can see in practice the terms you'll be learning about, get out a 10-K and follow along on the financial statements. It is possible some terms will be different and you might encounter new or different terms. If you have questions about this, feel free to contact me.

Since companies issue quarterly and annual earnings reports, more business stories are probably based on the income statement than any other document. Many of these stories are written right from the company earnings release and don't contain any real reporting or analysis.

The income statement shows what the company generates in profits or losses during the reporting period, such as a quarter or year. This report, also referred to as an earnings statement, answers this question: how much did the company gross and net in the period?

Key categories on the income statement are:

- **Revenues, gross revenues, net operating revenues or sales:** The company's total sales or revenues during the period. This is often referred to as the "top line."
- **Cost of goods sold:** For a manufacturer, this typically includes the cost of inventory (raw materials and supplies to make the company's products), as well as the expenses of turning raw materials into finished products, such as labor and direct overhead. For a retailer, this category is what the company pays for the products it sells on its shelves. It is only the cost of the merchandise purchased for resale, not the cost of providing the service to customers. For a service company, this category is typically small.
- **Gross profit:** Revenues minus cost of goods sold results in "gross profit." Most companies pay special attention to managing the gross profit margin or the gross margin
- **Operating expenses:** Most companies present operating expenses in a general category called "selling, general and administrative expenses." Operating expenses typically include: rent, salaries and wages paid, payroll taxes, property taxes, telephone, insurance, research and development, depreciation and amortization, and bad debts.

- **Operating income, operating profit, income from operations or income before extraordinary items:** Gross profit minus operating expenses yields “operating income.”
- **Other revenues or expenses:** Includes items such as discontinued operations, sale of an investment, unusual or extraordinary items, changes in accounting principles and minority interest.
- **Interest income (expense):** Companies pay interest on loans and earn interest on investments.
- **Income before income taxes:** Deducting the other revenues/expenses and interest income (expense) from operating income yields income before income taxes.
- **Income taxes:** The amount of income tax the company paid that year.
- **Net income:** Net income is what’s left after all expenses have been deducted. This is often referred to as the “bottom line.”

Most income statements contain several other pieces of information related to company performance. They include:

- **Earnings per share:** Analysts and stockholders like to know how much of a company’s profit is allocated to each share of common stock. EPS is determined by dividing net income minus preferred dividends by the average number of common shares outstanding for the period.

EPS is calculated for “basic” and “diluted” earnings. For basic EPS, net income minus any preferred dividends is divided by the average number of shares outstanding for the period. For diluted EPS, net income minus any preferred dividends is divided by a number reflecting the possible conversion of all convertible securities to common stock, and if all warrants or stock options were exercised, for the period.

- **Average shares outstanding:** The average number of common shares outstanding for the report period. The number of shares can vary during the reporting year because options are being exercised, the company is buying back stock or the company is issuing new stock in the market.

The Balance Sheet

The balance sheet is a snapshot of the company’s assets, liabilities and shareholders’ equity on the last day of the reporting period. The left side of the balance sheet lists the assets, or what the company owns. The right side lists the liabilities, or what the company owes, and the shareholders’ equity, or the funds invested in the company and retained earnings. The two sides must balance, so the balance sheet format is assets equal liabilities plus shareholders’ equity ($A = L + E$).

The balance sheet shows data from the two most recent years, which allows you to calculate changes from one year to another. Significant changes in any account must be examined and could be worth following up.

Balance sheets present the most liquid items at the top and move down to the least liquid items.

Some definitions in this section are adapted from "GAAP 2005: Interpretation and Application of Generally Accepted Accounting Principles" by Epstein, Nach, Black and Delaney (John Wiley and Sons).

Assets

- **Current assets:** Assets that could be expected to be turned into cash or sold or consumed within a year or within the normal operating cycle of the company, if it is longer than a year.
- **Cash and cash equivalents:** Cash and short-term, highly liquid investments. Examples include Treasury bills, commercial paper and money market funds. These instruments have three months or less to maturity.
- **Marketable securities:** Investments in assets that can easily be converted into cash, and which have minimal risk and maturity of less than one year. Typical these are government instruments and commercial paper.
- **Accounts receivable:** Amounts due from customers to the company for goods and services provided in the normal course of business. The receivables category often shows an entry called "less allowance for doubtful accounts," which presents an estimate of what the company expects will not be paid. It is essentially a bad debt estimate. Amounts are based on past experience and/or industry averages.
- **Inventories:** Goods on hand available for sale or materials on hand for producing those goods. Inventory is usually identified as being in one of three categories: raw materials, work-in-process or finished goods. The dollar amount allocated to each category is usually shown on the balance sheet or in the footnotes to the financial statements.
- **Other current assets or prepaid expenses:** The business will get some benefit from these entries within the next year. Examples include prepaid insurance, prepaid income tax and prepaid interest.
- **Property, plant and equipment:** Includes land, buildings, equipment, and leasehold improvements. These assets are recorded at historic cost, and then reduced in value ("depreciated") over the length of time they benefit the firm, called the depreciable life. Depreciation expense, which also has an income statement impact, reduces taxable income but does not reduce the company's cash flow.
- **Intangibles:** Assets that provide future economic benefits but do not exist in physical form. Intangibles include goodwill, patents, copyrights, and non-compete agreements.
- **Goodwill:** Goodwill is created when a company purchases another company for more than the acquired company's book value (book value is assets minus liabilities). The excess amount paid goes into the category "goodwill." That means that if a company pays \$3 million for another company, and the purchased company's book value is \$2 million, the goodwill is \$1 million. Under recent accounting rules, companies evaluate goodwill (called "impairment testing") and other assets annually to determine if the value at

which they are carried on the books has changed. If the value has changed, the assets are given a new value, which is generally lower.

Liabilities

- **Accounts payable and accrued expenses:** Accounts payable are obligations that result from the acquisition of goods and services. Payables include purchases of raw materials, supplies, services, etc., on credit.

Accrued expenses or accrued liabilities are amounts owed for goods or services whose benefits have been received but will be paid for in the future. Typical accrued expenses are payroll, payroll taxes, property taxes, rent, royalties, interest, commissions, etc.

A company might or might not show separate accounts payable and accrued liabilities categories but the entries are quite different. Amounts accrued are usually estimates while payables are definite amounts. Accrued liabilities usually have no bills have been yet received. Payables are bills.

- **Loans and notes payable:** Obligations that generally arise from the acquisition of goods or services. Due within a year.
- **Current maturities of long-term debt:** The amount of the long-term debt that is due within a year.
- **Income taxes payable:** Income taxes payable within the year.
- **Long-term debt:** Debt that must be paid at some point more than a year in the future.
- **Deferred income taxes:** Temporary differences in recognition and measurement between accounting standards and tax laws create deferred tax liabilities (and deferred tax assets). The portion deemed currently payable is classified as a current liability. The remaining amount is classified as a long-term liability.

Shareholders' Equity

- **Common stock:** The amount of capital that owners have invested in the business over time. The entry shows "par" value, which is the stock's stated value at the time it was issued. Par value is an arbitrary figure assigned by the company. This entry also shows how many shares are authorized, by the company's charter, to be sold and how many shares have actually been issued.
- **Preferred stock:** Some companies sell preferred shares, which differ significantly from common stock. Preferred shareholders are entitled to receive a fixed dividend before common holders, and have a priority in case the company is liquidated. Preferred stock often is non-voting. Common and preferred stock are often called capital stock.
- **Capital surplus, additional paid-in capital or capital in excess of par value of stock:** Reflects the fact that the original purchaser of company stock almost always pays a price that exceeds par value. For example, if a

company offered a new stock issue at \$10 a share, and it had a par value of \$1 a share, the capital surplus from that sale would be \$9 per share.

- **Retained earnings or reinvested earnings:** When a company makes profits, it can reinvest the funds or return them to the owners (stockholders) as dividends. Retained earnings (sometimes called accumulated undistributed net income) are profits that have been reinvested since the company was founded. If the company experiences a loss for a quarter or year, it dips into retained earnings to cover the difference.
- **Treasury stock:** Companies often buy back their own stock, going into the market to acquire their shares. The company purchases the shares with its own funds and therefore reduces the amount of owners' equity. Treasury stock's value typically is the amount the company paid to re-acquire the stock and is usually a negative number. The company typically pays "market price" for the shares.

Companies purchase their own stock for several reasons: the company might need to use the stock for its employee stock option plan; it might think its stock is undervalued and buying it now will enable the company to benefit when the price rises, or it might want to improve its earnings per share. Since EPS is determined by dividing net income minus preferred dividends by the average number of common shares outstanding, taking shares out of circulation increases the EPS.

Statement of Cash Flows

All public companies operate on the accrual method of accounting, which means that income and expense are recognized as they are earned or incurred, even though cash may not have been received or paid. The balance sheet and income statement reflect the company's performance under the accrual method. (Think of it as a way of keeping score.) But to get an accurate picture of the company, you need to know how it is handling its cash.

This statement shows how cash moved through the company over the year and lets you see if the company's cash position increased or decreased. It presents data for the past three years.

Key components of the statement of cash flows are:

- **Operating activities:** This category focuses on what the company does as a business, and excludes investing and financing activities. The primary entry for operating activities is net income. Note that depreciation and amortization are added back into this category because they are non-cash deductions under the accrual method of accounting and not cash transactions.
- **Investing activities:** This reflects payments for acquiring and disposing of long-term productive assets or businesses, and securities that are not considered cash equivalents. Also, lending money and collecting on short-term loans.
- **Financing activities:** This reflects issuing or repurchasing stock and debt, and paying of dividends.

- **Net change in cash and equivalents:** Shows the increase or decrease in cash for the year.
- **Balance at beginning of the year:** Cash balance at start of the year.
- **Balance at the end of the year:** Cash balance at end of the year.

Free cash: This is one of the most important numbers for executives and analysts, yet you will see it on very few cash flow statements. You will find it in the Management's Discussion and Analysis for some companies and even in the glossy pages of the annual report for a few companies. Free cash refers to the cash that is left after a company maintains its productive capacity by doing things such as modernizing plants by purchasing new equipment or buying another business.

Free cash is obviously essential for a company's ability to expand activities, pay down debt, buying back shares, etc. There is no one way to calculate free cash, although a common format involves subtracting capital expenditures from cash from operations. For years, American Standard's annual report featured an explanation of how it calculated free cash: net cash provided by operating activities is reduced by "proceeds from the initial sale of receivables"; by purchases of property, plant, equipment and computer software; by proceeds from disposal of property, and by proceeds from sale and leasebacks.

Analyzing the Numbers

A good rule of thumb when looking at the income statement, the balance sheet, or the cash flows statement is to look for changes from year to year in any category that seem out of the ordinary. For example, on the income statement, look first at revenues or operating income to determine if they went up or down. If they increased, did they increase faster than last year and/or faster than the rate of inflation? If sales lagged behind inflation, this could indicate the company may be having difficulty selling its products. Do the same thing with net income.

On the cash flows statement, look to see if cash has been increasing or decreasing over the last several years. Look for other categories where the numbers seem out of line. For example, has the company's cash declined because the firm has launched an aggressive stock buyback program, or invested in capital equipment that will yield future cash flows? The number that appears out of line could indicate problems or it could indicate future growth for the company.

Also, what has happened with cash in general? A number of major companies such as Cisco and Microsoft are sitting on huge piles of cash. Other companies' cash has been wasting away in the tough economy. Likewise, what has the trend line been for free cash? An analyst will examine both the trend line and amount of cash and free cash. Also, be alert for the trend in capital expenditures (found in the category "Investing Activities" and often called something like "purchases of property and equipment." Some companies are reducing capital expenditures to keep up their cash at the end of the period.

Words of caution

Now that you have an idea of how to examine a company's numbers, here are some important words of caution. First, the numbers in an annual report or 10-K, though certified by an auditor and presented in accordance with GAAP, are a function of the

accounting assumptions used in their preparation. Different assumptions will produce different results. You should read the footnotes to learn the assumptions.

Developing the ability to understand financial statements takes time and practice. Formats and terminology can vary by company and industry. The more statements you read and analyze, the more comfortable you will be. One way to build this skill is to start reading these documents regularly. Next, become friends with a CPA with a large firm or with an accounting or finance professor at your local university. Then you can run your analysis past her to see if your conclusions make sense.

Excellent websites and books also offer extensive insight into company financial performance. In addition to websites mentioned above, another excellent site is footnoted.com, where Michelle Leder probes SEC filings to give readers insights with "a snarky flavor that fans savor," according to one reporter. Leder's book, *Financial Fine Print: Uncovering a Company's True Value*, is also filled with insights.

A few other noteworthy books:

Quality of Earnings by Thornton O'Glove. Although last printed in 1998, this is still the classic of the genre.

The Edgar Online Guide to Decoding Financial Statements: Tips, Tools, and Techniques for Becoming a Savvy Investor by Tom Taulli. Thorough, readable.

The Guide to Understanding Financial Statements: The Popular Reference for Non-Financial Managers, Entrepreneurs, and Investors by S.B. Costales & Geza Szurovy.

The Financial Numbers Game: Detecting Creative Accounting Practices by Charles Mulford and Eugene Comiskey

Financial Shenanigans (second edition) by Howard Schilit.

Hidden Financial Risk: Understanding Off-Balance Sheet Accounting by J. Edward Ketz.

Contacting the author

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About the author

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He received the Media Management and Economics Division's Barry Sherman Teaching Award at the Association for Education in Journalism and Mass Communication national convention in 2008. He received the 2002 Distinguished Achievement Award from the Society of American Business Editors and Writers. He has been rated an All-Star speaker by IABC audiences.

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