

Check the Vital Signs

Fundamental Analysis Used in Investing

Objective



Do Your Homework

What's It Worth?

The best thing about investing in the stock market is, of course, the possibility of high returns. But here's another benefit—learning about companies and the people and products behind them. A fascinating array of business activity is out there! From solid and reliable firms to innovative and maybe-crazy upstarts, investors can purchase a share in the profits of whatever looks promising. Buying stock is an opportunity to get in on the action, without so much as breaking a sweat.

Well, *maybe* without breaking a sweat. For a better chance at those potential returns, an investor has to do some homework. And what would that homework be? To determine as accurately as possible the value of a company's stock.

Valuing a stock can be done in a number of ways. An economic viewpoint looks at **market value**: a stock is worth whatever people are willing to pay for it. This approach is based on the idea that investors have complete information about companies, a rather idealistic notion for the large, dynamic stock market. Stock price, therefore, may not fully capture the underlying value of a company's future.

Book value, also called **stockholders' equity**, falls short as well. It's what the company is worth from an accounting point of view. Even though accounting information is readily available to investors, book value does not include **intangible assets**,

such as **brands**, patents, or **human capital**. In addition, the value of hard assets, such as property and equipment, can be distorted by tax laws and accounting procedures, thus distorting book value. Book value is definitely an important component of value, but by itself is an incomplete picture.



What's It Really Worth?

What investors need, what really helps them to make sound investing decisions, is knowledge of a company's **intrinsic value**, its actual, fair worth. To discover intrinsic value, investors conduct **fundamental analysis**—the study of all aspects of a company: the way it makes money, products, position in the industry, management practices, sales, earnings, etc. It's everything about the company itself, with special emphasis on past performance as a possible indicator of future performance.

Fundamental analysis begins with the most basic description of a company: "How does this company make money?" Other **qualitative** measures, which are by nature subjective, include an assessment of the company's product mix, the level of competition, management, strategy, and the strength of its brand.

Objectives:

- A** Describe fundamental analysis.
- B** Discuss measures used in fundamental analysis.



Although these qualitative factors are important, fundamental analysis relies mainly on a thorough examination of a company's financial statements, using comparisons and ratios to determine financial health. Even though this **quantitative** look at the past is not *necessarily* an indicator of the future, it provides a basis for predicting performance. Is the company growing? Is the trend likely to continue?

Finally, fundamental analysis arrives at an estimate of value. By comparing this to current price, investors can discover stocks that are **overvalued**, that is, too expensive given the fundamentals, or **undervalued**. In effect, undervalued stocks are "on sale." Fundamentally sound, growing companies offering the potential for profit, *on sale*? What could be better than that!

One Way . . . Not

Fundamental analysis has many valid approaches. Some take a loose look at a few widely-accepted ratios, and some are more systematic and thorough. Every educated investor has special insights and favorite ratios, but basically, anyone who recommends a good look at a company's financial statements before purchasing a stock is recommending *fundamental analysis*. The important thing is that regardless of the specific approach, knowing the companies behind the stocks is the basis for making good investment choices.

C-A-N S-L-I-M

Here's a tidy approach to fundamental analysis. William J. O'Neil, founder of the financial newspaper *Investor's Business Daily*, created this method called C-A-N S-L-I-M. He advises investors to look for the following:

- C** Steady, significant increases in **current earnings**
- A** History of **annual earnings increases**
- N** Something **new**, either a new product, new management, or new highs
- S** Low **supply** and high demand, indicated by a small number of outstanding shares and high trading volume
- L** **Leader** in its industry
- I** **Institutional sponsorship**, such as investment from pension funds and mutual funds
- M** Overall **market direction** that is trending upward



Value Is in the Details

Have you ever heard the statement, "It's all relative"? In fundamental analysis, although there are certainly favorites, no single measure stands out as the only measure to watch. Everything needs to be put in context to be meaningful. As you read about the measures that follow, keep in mind that they are of little use by themselves. Their meaning comes when they are used (a) as part of the overall picture of a company, (b) over time, and (c) in comparison to other companies in the industry.

Know the Company

If you are considering investing in a company, chances are you already have personal experience with its products or services. However, you need to know much more to make an informed investment. Here's a test: Can you, as a potential investor, describe in a few sentences what the company does, how and where it

makes money, and what is special about it? Make sure you know the answers to these questions:

- What does the company do? What is its **business model**?
- What is its product or service? Is there long-lasting appeal? Are there new products or services being developed?
- Where does the company do business? Is it national, international, or global?
- Who are its customers? Are they part of a specific demographic?
- Who's running the company? Do they have reputations and experience as effective managers?



- How big is the company? What are its annual sales, number of **outstanding shares**, **capitalization**, and number of stores or buyers?
- Is there a strategy for growth and for dealing with competition?
- What is special about the company? The brand, a product, a patent, a certain way of doing business?

“Generally speaking, increasing sales lead to increasing earnings per share, which lead to increasing stock prices.”

Size Up the Industry

Each **sector** and **industry** has unique characteristics that affect the profit potential of the companies in it. Changes in technology, new laws and regulations, and even changes in popular taste can influence the performance of *all* the companies in a particular industry.

For example, the home electronics industry, where Best Buy dominates, suffers in times of economic decline. Does that mean Best Buy is a poor investment? Not at all, but it does mean that its stock may be **cyclical**, rising and falling quickly in response to the economy overall. It is helpful to know that when analyzing Best Buy for potential investment. Many industries are cyclical, including airlines, apparel, automobiles, and entertainment.

Profit potential is also affected by the level of competition in an industry. Intense competition affects a company's pricing decisions, availability of suppliers and raw materials, opportunity for growth, and many other strategic issues. Interestingly, level of competition is not necessarily tied to the number of companies in an industry. With just a handful of players in the soft drink industry, for example, Pepsi and Coca-Cola have one of the fiercest, long-standing rivalries going.

Another consideration is the ease with which other companies can enter the industry. If there are low barriers to entry (think of Michael Dell starting out in his garage), competition is likely to be intense. If there are high barriers to entry (think of the specialized knowledge and patents in pharmaceuticals), a steady stream of new competitors is unlikely.

Tell the Story With Numbers

Quantitative measures, those that rely on numbers, are especially valuable in making comparisons. Quantitative measures are usually **ratios** that show the relationship between numbers on a company's financial statements, which are invaluable in understanding how a company operates. When you're ready to compare companies, move on to reputable secondary sources such as Standard and Poor's or Value Line, which are often available free through public libraries. They save time because they *consolidate current and historical financial information into easy-to-read, standardized formats.*

Sales. Healthy sales drive business, yet they are an incomplete picture. Companies with similar sales are likely to vary in profitability, depending on cost of goods sold, efficiency of operations, mergers and acquisitions, plans for new products, etc. (We'll talk more about profitability in a moment.) Like most quantitative measures, the amount of sales by itself is not important; it's how sales compare to previous sales. As an investor, you want to see sales that increase over time, that show a steady pattern of growth. Be sure to view sales as a first, general indicator that is part of a larger picture.

Earnings per share. While sales begin the story, earnings per share (EPS) gets right to the bottom line. **Earnings** are profits—as an investor, you want to know how those earnings translate into profit for you. EPS tells you how much profit goes to each share of common stock. It is calculated by dividing net earnings by the number of outstanding shares of common stock. Over time, an increasing EPS implies that the company is well run. For example, using the 2004 10-K report from <http://www.sec.gov> for the McDonald's Corp. (NYSE: MCD), EPS is figured this way:

$$\begin{aligned}
 \text{EPS} &= \frac{\text{net earnings}}{\# \text{ of shares outstanding}} \\
 &= \frac{\$2,279,000,000}{1,270,000,000 \text{ shares}} \\
 &= 1.79
 \end{aligned}$$

In 2004, McDonald's earned \$1.79 for each share of outstanding common stock.

As with most ratios, EPS can be calculated in a number of ways. It's usually reported as a trailing indicator, meaning that it uses last year's earnings. Forward EPS uses projected earnings. Be sure you are comparing "apples with apples" when you use EPS to compare companies.

Get the 4-1-1

To get to know a company, your first stop should be the company itself. The web site <http://annualreports.com> has direct links to annual reports on company web sites and to SEC filings.

Profitability. A company's profitability can be determined in a few ways, but they all result in a *percentage* that lets you know how much of sales the company retains as profit. From the income statement, various levels of income are divided by sales.

Gross profit margin, for example, tells you what percentage of sales is left after subtracting the direct cost of producing the goods. **Net profit margin**, the so-called "bottom line," considers all aspects of running the business, summing up in one number how well the managers extract a profit from each dollar of sales.

Let's use McDonald's as an example again. In 2004, McDonald's Corporation had total sales of \$19.065 billion (*billion!*). Net income was \$2.279 billion. (We called it "net earnings" before. We could have said "net profit" too.) Net profit margin, therefore, was 12% ($2.279 / 19.065$). Put another way, McDonald's had a net income of 12¢ of every dollar in sales.

Return on equity. Another measure of management's skill is how well it uses the money invested by stockholders. A company sells shares of stock, and then what? Simply stated, the money helps cover costs, which result in sales, which result in profit. Return on equity (ROE) measures management's skill in turning your investment into profit. It is calculated by dividing net income by book value. A high ROE, compared to others in the industry or to past ROEs, means that management is running the company more efficiently.

Price-earnings. By far and away, price-earnings (PE) is the most popular measure of the value of a stock. Some investors rely on it almost exclusively! It differs from the ratios mentioned thus far in that it takes stock price into consideration, shedding some light on whether the stock is overvalued or undervalued.

PE is calculated by dividing a stock's price by earnings per share (see above). If a share of Company A's stock sells for \$60 and it has an EPS of \$3, then Company A is trading at a PE of 20 ($60 / 3 = 20$). This tells us that investors are willing to pay \$20 for every dollar of earnings. PE is often referred to as the **multiple**; in our example, it indicates that investors are willing to pay 20 times the current EPS.

Why would investors be willing to pay such a premium? Because they *expect* the stock to return more in the future. A PE that is higher than the industry average means that investors expect the company to grow and be quite profitable. A PE that is lower than the industry average means that investors have low expectations for performance.

*As mentioned earlier, EPS can be trailing, forward, or a blend. Used here, it can reflect growth over one year or five years. When comparing PEGs, be sure to use the same variety of EPS.

“It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price.”

— Warren Buffett, *The World's Greatest Stock Market Investor*

Always note how a particular PE is figured—with a trailing EPS, a forward EPS, or some combination—and be sure to use the same formula for every stock you compare it to.

Price-earnings and growth. Many investors now use the price-earnings and growth (PEG) ratio because it goes one step further than PE. Recall that a low PE indicates that investors have low expectations for a stock's profitability. Using PE, it is difficult to gauge whether those expectations are valid or whether the stock is simply undervalued. By incorporating growth into the equation, PEG can help us decide.

PEG is calculated by dividing the PE by annual EPS* growth. A stock with a PE ratio of 40 and projected earnings per share growth of 10% has a PEG of 4 ($40 / 10 = 4$). In general, the lower the PEG the better; investors would be paying less for each unit of earnings growth.

PEG is a ratio with a ratio in the numerator and another ratio in the denominator! If you're becoming overwhelmed by the numbers, keep in mind that ratios are little more than simple division problems that compare the numbers in financial statements. Once these comparisons, which are really percentages, are calculated, it's easy to compare them to similar companies. Figuring PEG may take a few more steps, but the effort is rewarded by better information about a stock's potential.

The Upside

Initially, fundamental analysis requires that an investor spend some time getting to know the company. The benefit of doing fundamental analysis is that after choosing to purchase a stock, an investor needs to do only periodic reviews, looking for significant changes. Watching daily price fluctuations and agonizing over whether to buy or sell isn't necessary. As long as the *fundamentals* of the company have not changed, an investor can expect stock prices to go up as earnings grow.