**Forces That Move Stock Prices**

By David Harper

Have you ever wondered about what factors affect a stock's price? Stock prices are determined in the marketplace, where seller supply meets buyer demand. But unfortunately, there is no clean equation that tells us exactly how a stock price will behave. That said, we do know a few things about the forces that move a stock up or down. These forces fall into three categories: fundamental factors, technical factors and market sentiment.

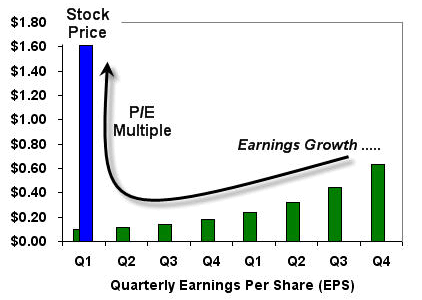
**Fundamental Factors**

In an efficient market, stock prices would be determined primarily by fundamentals, which, at the basic level, refer to a combination of two things: 1) An earnings base (earnings per share (EPS), for example) and 2) a valuation multiple (a P/E ratio, for example).

An owner of a common stock has a claim on earnings, and earnings per share (EPS) is the owner's return on his or her investment. When you buy a stock, you are purchasing a proportional share of an entire future stream of earnings. That's the reason for the valuation multiple: it is the price you are willing to pay for the future stream of earnings.

Part of these earnings may be distributed as dividends, while the remainder will be retained by the company (on your behalf) for reinvestment. We can think of the future earnings stream as a function of both the current level of earnings and the expected growth in this earnings base.

As shown in the diagram, the valuation multiple (P/E), or the stock price as some multiple of EPS, is a way of representing the discounted present value of the anticipated future earnings stream. (To learn about present value, see Understanding the Time Value of Money.)



**About the Earnings Base**

Although we are using EPS, an accounting measure, to illustrate the concept of earnings base, there are other measures of earnings power. Many argue that cash-flow based measures are superior. For example, free cash flow per share is used as an alternative measure of earnings power.

The way earnings power is measured may also depend on the type of company being analyzed. Many industries have their own tailored metrics. Real estate investment trusts (REITs), for example, use a special measure of earnings power called funds from operations (FFO). Relatively mature companies are often measured by dividends per share, which represents what the shareholder actually receives.

**About the Valuation Multiple**

The valuation multiple expresses expectations about the future. As we already explained, it is fundamentally based on the discounted present value of the future earnings stream. Therefore, the two key factors here are 1) the expected growth in the earnings base, and 2) the discount rate, which is used to calculate the present value of the future stream of earnings. A higher growth rate will earn the stock a higher multiple, but a higher discount rate will earn a lower multiple.

What determines the discount rate? First, it is a function of perceived risk. A riskier stock earns a higher discount rate, which in turn earns a lower multiple. Second, it is a function of inflation (or interest rates, arguably). Higher inflation earns a higher discount rate, which earns a lower multiple (meaning the future earnings are worth less in inflationary environments).

In summary, the key fundamental factors are:

* The level of the earnings base (represented by measures such as EPS, cash flow per share, dividends per share)
* The expected growth in the earnings base
* The discount rate, which is itself a function of inflation
* The perceived risk of the stock.

**Technical Factors**

Things would be easier if only fundamental factors set stock prices! Technical factors are the mix of external conditions that alter the supply of and demand for a company's stock. Some of these indirectly affect fundamentals. (For example, economic growth indirectly contributes to earnings growth.) Technical factors include the following:

**Inflation** - We mentioned inflation as an input into the valuation multiple, but inflation is a huge driver from a technical perspective as well. Historically, low inflation has had a strong inverse correlation with valuations (low inflation drives high multiples and high inflation drives low multiples). Deflation, on the other hand, is generally bad for stocks because it signifies a loss in pricing power for companies. (To learn more, read All About Inflation.)

**Economic Strength of Market and Peers** - Company stocks tend to track with the market and with their sector or industry peers. Some prominent investment firms argue that the combination of overall market and sector movements - as opposed to a company's individual performance - determines a majority of a stock's movement. (There has been research cited that suggests the economic/market factors account for 90%!) For example, a suddenly negative outlook for one retail stock often hurts other retail stocks as "guilt by association" drags down demand for the whole sector.

**Substitutes** - Companies compete for investment dollars with other asset classes on a global stage. These include corporate bonds, government bonds, commodities, real estate and foreign equities. The relation between demand for U.S. equities and their substitutes is hard to figure, but it plays an important role.

**Incidental Transactions** - Incidental transactions are purchases or sales of a stock that are motivated by something other than belief in the intrinsic value of the stock. These transactions include executive insider transactions, which are often prescheduled or driven by portfolio objectives. Another example is an institution buying or shorting a stock to hedge some other investment. Although these transactions may not represent official "votes cast" for or against the stock, they do impact supply and demand and therefore can move the price.

**Demographics** - Some important research has been done about the demographics of investors. Much of it concerns these two dynamics: 1) middle-aged investors, who are peak earners that tend to invest in the stock market, and 2) older investors who tend to pull out of the market in order to meet the demands of retirement. The hypothesis is that the greater the proportion of middle-aged investors among the investing population, the greater the demand for equities and the higher the valuation multiples. (For more on this, see Demographic Trends And The Implications For Investment.)

**Trends** - Often a stock simply moves according to a short-term trend. On the one hand, a stock that is moving up can gather momentum, as "success breeds success" and popularity buoys the stock higher. On the other hand, a stock sometimes behaves the opposite way in a trend and does what is called reverting to the mean. Unfortunately, because trends cut both ways and are more obvious in hindsight, knowing that stocks are "trendy" does not help us predict the future. (Note: trends could also be classified under market sentiment.) (For more insight, check out Short-, Intermediate- and Long-Term Trends.)

**Liquidity** - Liquidity is an important and sometimes under-appreciated factor. It refers to how much investor interest and attention a specific stock has. Wal-Mart's stock is highly liquid and therefore highly responsive to material news; the average small-cap company is less so. Trading volume is not only a proxy for liquidity, but it is also a function of corporate communications (that is, the degree to which the company is getting attention from the investor community). Large-cap stocks have high liquidity: they are well followed and heavily transacted. Many small-cap stocks suffer from an almost permanent "liquidity discount" because they simply are not on investors' radar screens. (To learn more, read Diving In To Financial Liquidity.)

**Market Sentiment**

Market sentiment refers to the psychology of market participants, individually and collectively. This is perhaps the most vexing category because we know it matters critically, but we are only beginning to understand it. Market sentiment is often subjective, biased and obstinate. For example, you can make a solid judgment about a stock's future growth prospects, and the future may even confirm your projections, but in the meantime the market may myopically dwell on a single piece of news that keeps the stock artificially high or low. And you can sometimes wait a long time in the hope that other investors will notice the fundamentals. (For related reading, see Investors Intelligence Sentiment Index.)

Market sentiment is being explored by the relatively new field of behavioral finance. It starts with the assumption that markets are apparently not efficient much of the time, and this inefficiency can be explained by psychology and other social sciences. The idea of applying social science to finance was fully legitimized when Daniel Kahneman, a psychologist, won the 2002 Nobel Memorial Prize in Economics. (He was the first psychologist to do so.) Many of the ideas in behavioral finance confirm observable suspicions: that investors tend to overemphasize data that come easily to mind; that many investors react with greater pain to losses than with pleasure to equivalent gains; and that investors tend to persist in a mistake.

Some investors claim to be able to capitalize on the theory of behavioral finance. For the majority, however, the field is new enough to serve as the "catch-all" category, where everything we cannot explain is deposited.

**Summary**

Different types of investors depend on different factors. Short-term investors and traders tend to incorporate and may even prioritize technical factors. Long-term investors prioritize fundamentals and recognize that technical factors play an important role. Investors who believe strongly in fundamentals can reconcile themselves to technical forces with the following popular argument: technical factors and market sentiment often overwhelm the short run, but fundamentals will set the stock price in the long-run. In the meantime, we can expect more exciting developments in the area of behavioral finance since traditional financial theories cannot seem to explain everything that happens in the market.