Understanding Fair Valuation: A Common Sense Approach To Long-Term Investing Success  
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Introduction

In order to understand what the intrinsic value or fair value of a common stock is, you must think like a long-term business owner and not like a stock trader. Additionally, you must think like a business owner that has no intention of selling their business. Put another way, your business generates your livelihood. Therefore, your primary focus and attention is on answering the question: how’s business?

When you own your own business you care about sales, cash flows and ultimately net profits. These are the things that make your business valuable to you simply because these are the things that produce your income.

Valuation is a Mathematical Principle and Not a Vague Concept

When I speak of valuation, I am referring to the mathematical calculation of the returns (including both capital appreciation and dividend income) which you could prudently expect to earn from the company's cash flows (earnings). Those returns should be large enough to compensate you more than you could earn from a theoretically riskless investment like a Treasury bond. If you are not being compensated for the extra risk you're taking by investing in stocks, then I believe you are paying more than you should be.


The venerable investor Warren Buffett has a real knack of putting complex concepts and ideas into simple and easily understood terms. In my opinion, his quote, "Price is what you pay. Value is what you get" is one of the more profound and important statements he has ever uttered. If truly understood, these simple words represent perhaps some of the most important bits of investment wisdom that an investor in common stocks could ever receive.
The concept of fair valuation represents the key to receiving the full benefit that these wise words provide. Knowing the price you pay is simple and straightforward. And, although many have an intuitive understanding of value, its deeper meaning is often only vaguely comprehended. Anyone who has truly made the effort to study Warren Buffett’s investment philosophy understands that receiving value on the money he invests is of high importance to him.

So how do you know, when buying a stock, if you’re getting value or not for your money? I contend that the answer lies in the amount of cash flow (earnings) that the business you purchase is capable of generating on your behalf. And regardless of how much cash flow the business can generate for you, its value to you will be greatly impacted by the price you pay to obtain it. If you pay too much you get very little value, but if you pay too little then the value you receive is greatly increased.

Therefore, if value is what you’re looking for, then it’s important that your attention be placed on the potential cash flows that you’re expecting to receive. Unfortunately, few investors possess the presence of mind to focus on this critical element. Instead, investor attention is more commonly and intensely placed on stock price and its movement. A rising stock price is usually considered to be good, and a falling stock price is considered bad. However, prudent investors understand, recognize and acknowledge that the stock market often incorrectly prices the stock behind a business relative to its intrinsic value.

Another investing great offered his view on this important point: "Just because you buy a stock and it goes up does not mean you are right. Just because you buy a stock and it goes down does not mean you are wrong." Peter Lynch 'One Up On Wall Street'

Just like the Warren Buffett quote, Peter Lynch’s quote is also based on the principle of sound valuation. The point is that a rising stock may be dangerously overvalued, while a falling stock price may indicate that the company is becoming a rare opportunity on sale.

Knowing the difference will materially impact not only the long-term rate of return the investor receives, but perhaps more importantly, the risk they are taking to get it. As I will illustrate later, you can dramatically overpay for even the best company. It is a truism that the stock market can, and will, inaccurately appraise the value of a business from time to time - up or down.

From what has been said so far, it should be clear that in order to receive value, you have to know how to calculate value. Then, and only then, can you be absolutely certain that you’re investing in a stock and receiving value for the price you pay. However, there is an important caveat that needs to be introduced.

Just because you buy a stock at value doesn’t necessarily mean that you will receive a high return. This is because value, although important, is only one component of future return. The other important component is the earnings growth rate of the business.

To clarify, you can buy a slow-growing company at sound valuation, and even at the same valuation as a faster growing company, while still earning only a modest rate of return. In fact, it could be argued that only being willing to invest at sound valuation is more critical for a slow grower than it is for a
The rationale here is that there is very little margin for error when investing in a low growth security. Therefore, it’s even more imperative that you get valuation correct. This may be one of the most confusing aspects of fair valuation, or value, that I will elaborate on later.

**The Foundational Principles of Value**

What gives a business (stock) value? Ultimately, any business, public or private, has its value derived from the amount of cash flow it is capable of generating for its stakeholders (stockholders). Not only will capital appreciation depend on the level of earnings, dividends are also a function of earnings. It is because of this principle that the discounted cash flow (DCF) method of valuing a business is so widely-accepted by scholars and professional investors. Consequently, this article on how to value a business is strongly based on utilizing fundamental valuations based on cash flows (earnings) as the primary method for assessing fair value or True Worth™ as I like to think of it as.

However, I intend to spare the reader the tedious task of evaluating or calculating long and complex mathematical formulas in order to assess fair valuation. Instead, I will focus on presenting logical explanations and straightforward discussions of the principles behind these important valuation methods. Additionally, I will provide what I hope the reader finds as easy-to-understand pictures as evidence supporting my points. Anyone who is interested in a more scholarly approach can simply Google: How to value a company using the discounted cash flow method (DCF).

I believe investors can possess a practical and useful understanding of the basic principles of fair value. In order to receive value when you buy a stock, you have to be careful that you are only paying a price that represents sound valuation. Fair valuation is only manifest when your investment in a business is supported by a strong foundation of fundamentals. These would include, but are not limited to, strong cash flow and earnings generation supported by a proven business model with prospects for continued growth.

Furthermore, the terms “value” and “valuation” though not synonymous, are very closely related. I am going to do my best to illustrate that the investor can only get value when buying a stock if they apply the discipline of sound valuation when they initially invest.

In other words, when the price you pay is at a level that equals sound valuation, then good value is what you will receive. As previously suggested, if you overpay your value will be less, and if you’re fortunate enough to buy on the cheap, your long-term value will be enhanced.

**Calculating Intrinsic Value with Zero Growth, Moderate Growth and Low Growth**

Let’s start by looking at sound valuation from the perspective of minimum to maximum levels based on rates of growth. The reader should understand that much of what I will present next represents an overly-simplistic view of valuation. However, I believe that this is the best way to lay a sound foundation of understanding of this important investing principle.
There will be subtle calibrations that investors need to apply when actually making investments in real world situations. On the other hand, the core principle will aptly apply and hold true. Let's initially look at how you would value a future stream of income that doesn’t grow. A 10-year treasury bond would represent a good proxy to illustrate this principle. The interest rate is fixed and guaranteed, but it does not grow.

Common sense and logic would dictate that you would never be able to buy a Treasury bond at one times its interest. In other words, a stream of income has an intrinsic value that is some multiple of its annual income stream. In order to calculate current valuation, you simply divide the interest rate it pays into its price. With 10-year treasuries yielding approximately 2.2% today, you divide 2.2 (the rate) into 100 (the price) and discover that it is selling at approximately 45 ½ times interest.

Historically, this is a very high price, which means that yields are also historically low. Therefore, people, possibly still traumatized by the Great Recession, are buying Treasury bonds today because they are willing to pay the high price for the safety they perceive they are receiving. Under more normal levels of interest rates, 10-year Treasury bonds have been more typically offered at yields of 6% to 8%. Do the division and this calculates to valuations of approximately 12 to 17 times interest. Nevertheless, any investment has a value that is greater than its annual income stream, but investors should understand there are rational limits to the multiple you pay for an income stream that should not be exceeded.

Common stocks are certainly not as safe as Treasury bonds; however, the principles behind sound valuation still apply. In other words, as long as a company generates an income stream, even if it doesn’t grow, it will have value that is greater than its annual income stream. Otherwise, this no growth investment would be generating cash on cash returns of 100%. Clearly, this would be illogical. Consequently, just like a Treasury bond trades at a multiple of interest, a common stock will trade at a multiple of its income stream which is generally represented as earnings. It is commonly expressed as a P/E ratio.

The reason I started with looking at a safe but no growth fixed income vehicle was to establish the minimum foundation of valuation. Historically, the average price earnings ratio that has been applied to the average company (the S&P 500) for the past 200 years has been approximately within a range of 15-16. This calculates to an earnings yield of approximately 6 to 7%.

I do not believe it is a coincidence that this also represents the long-term average return that stocks have produced. In order to keep my promise of keeping it simple, I additionally point out that this valuation calculation also relates to normal fixed income yields of 6% to 8% as discussed above.

Most importantly, this 15 P/E multiple should be thought of as a barometer used as the starting point for valuation calculations and not an absolute number. However, this helps explain why my three examples presented below, each with different earnings growth rates, have approximately the same fair value PE of 15.

Utilizing the F.A.S.T. Graphs™ fundamentals analyzer software tool, my first example will review the low growth utility stock SCANA Corp (SCG). In order to illustrate the low rate of earnings growth that
SCANA and utility stocks in general grow at, I am utilizing the logarithmic option of the research tool. This first graph plots SCANA's earnings only since 1997. The orange line on the graph represents a P/E ratio of 15 which, as discussed above, I offer as a proxy of fair value for a company growing earnings at 3.2% per annum.

As I will introduce next, when stock prices are overlaid on the graph we should see a high correlation between price and earnings – if my thesis has any merit. In other words, we should see the price tracking the earnings line and we should also see evidence of fair valuation, overvaluation and undervaluation manifesting from time to time. More plainly stated, if the price is touching the orange line the company's stock is fairly valued, if the price is above the orange line the company's stock is overvalued, and when the price is below the orange line it is undervalued.
This next graph on SCANA is presented arithmetically because I also include dividends represented in two forms. The light green shaded area above the orange line represents dividends after they have been paid to shareholders. The second iteration of dividends is the white line (it’s actually honeydew green) that represents those same dividends as part of earnings (the dark green shaded area) prior to being paid to shareholders.

What I am asking the reader to focus on is how monthly closing stock prices (the black line) over this timeframe have closely tracked the company’s earnings at a P/E ratio of 15 (the orange line). Also notice what happened every time the price fell below or above the orange P/E ratio of 15. These times represent vivid depictions of overvaluation, undervaluation and how price inevitably returns to fair valuation.
When examining SCANA’s performance over this time period notice how capital appreciation and earnings growth are in close alignment. Also notice the contribution of dividends to total return.

### Performance Results

![Performance Results Chart](chart.png)

With my next example I present the Dividend Champion ABM industries Incorporated (ABM), a company that has increased its dividend for 48 consecutive years. This particular example has grown earnings at the average rate of 6.5% since 1996, or approximately twice as fast as we saw with our SCANA example. Nevertheless, we draw the orange valuation reference line utilizing the same fair value P/E ratio of 15.

Without presenting a long and detailed explanation, the fair value P/E ratio of 15 represents a sound proxy of fair valuation for companies with earnings growth ranging from 0%-15%. Here I again ask that the reader keeps in mind that the fair value P/E ratio of 15 should be thought of as a valuation reference and not an absolute.

The primary principle that supports this valuation level is the fact that a P/E ratio of 15 represents an earnings yield of approximately 6.7%, which as previously stated, is also the common long-term return that stocks on average have generated. I also ask that the reader remembers that fair value is only one component of potential future returns. The second important component is the earnings growth rate that a given company achieves.
To be clear, even though I am arguing that both SCANA and ABM Industries are fairly valued at a P/E ratio of 15, this only establishes the principle of sound valuation. In other words, even though both companies are theoretically fairly valued at a P/E ratio of 15, ABM Industries is likely to generate a higher level of capital appreciation due to its faster earnings growth rate. In this regard, and as I previously suggested, fair valuation is more representative of a reasonable level of risk based on current valuation than it is on generating a higher long-term return.

Most importantly, I chose this ABM example because it also clearly validates my previous statement that the market will incorrectly price a company’s stock from time to time. If you analyze the following earnings and price correlated graph closely, you will see that over the long run stock price does follow earnings. However, you will also see numerous periods of significant overvaluation (when the price is disconnected from and above the orange line).

But most importantly, these periods of significant overvaluation also vividly represent the risk I discussed above, and supports the principle that price inevitably moves back into alignment with fair value. Of course, the same principle applies on the few times that ABM’s stock price became temporarily undervalued. Furthermore, this illustrates the important principle that fair valuation is not related to market timing. Instead, fair valuation is a principal of soundness supported by a foundation of fundamental values based on earnings and cash flows.
Examining the long-term performance of ABM Industries we again see a high correlation between earnings growth and capital appreciation. Note that the reason that capital appreciation is greater than earnings growth is because the company is currently overvalued.
How Do You Account for PE Ratios Below 15?

Anytime you come across a company whose price earnings ratio is less than 15, which I have described as a foundational P/E ratio in this article, it’s usually associated with uncertainty. A current P/E ratio below 15 might possibly imply a concern that future earnings are expected to be less than current levels. In other words, this could mean that you are paying a higher P/E ratio for these expected lower future earnings.

For example, let’s assume you buy a dollar’s worth of earnings today and pay $15, or a PE ratio of 15. One year later, the dollar’s worth of earnings you paid $15 for today have fallen to only $.50 worth of earnings. Therefore, you have paid a P/E ratio of 30 for those lower future earnings. Consequently, we might assume that the market may have been acting as a discounting mechanism, or as suggested, just mispricing the company.

Other uncertainties that could cause chronic low P/E ratios below the standard P/E ratio of 15 could relate to quality considerations. There are also certain sectors, the energy sector comes to mind, where the market routinely applies a lower valuation. Of course, as previously stated, uncertainty is usually associated with those lower than justified valuations. Additionally, a P/E ratio below 15 may just be an example of the market undervaluing the company, as I pointed out earlier in this article.
Calculating Fair Value on Fast-Growing Companies (15% Or Better)

Thus far I have attempted to lay the foundation of understanding how to value a common stock. So far I have presented low to moderate earnings growth examples and commented on collapsing earnings which really have no value. Next I will look at companies that grow earnings at 15% or greater as I investigate the nuances of valuating this faster growth.

Extensive research over many years has led me to conclude that a P/E ratio equal to a company’s earnings growth rate (P/E=EPS growth) is more appropriate for companies that grow at faster rates. In Chapter 7 of his best-selling book One Up On Wall Street, the renowned investor Peter Lynch identified six general categories of common stocks: slow growers, stalwarts, fast growers, cyclicals, asset plays and turnarounds. This part of this article will focus on the fast grower category.

My definition of a fast grower is one that has consistently compounded earnings at 15% per annum or better over extended periods of time (five years or longer). Furthermore, the more consistent the growth has been, the better it fits my definition of a high growth stock.

This category of fast grower, Peter Lynch referred to as "superstocks" that he contended deserve the most attention from investors. The reason he believed they deserved the most attention, is because these are the stocks that will generate the highest total returns over the long run. Assuming of course you invest in them at fair value. Companies with these attributes are what Peter hunted for when he was seeking his "10 baggers" because he believed these were the most explosive stocks.

MasterCard Incorporated (MA) represents a classic example of a fast-growing company (stock). Earnings growth since it went public in May 2006 has averaged 26.8%. Therefore, consistent with the P/E ratio equal to the company’s earnings growth rate formula, the orange line on the graph represents a fair value P/E ratio of 26.8 for this faster grower. Fair value for this high-growth company is significantly higher than what we saw with our previous examples because of the compounding power of its faster earnings growth.

Once again, utilizing this as a valuation reference, we see that stock price (the black line) follows earnings, and we also see periods of time where the stock is undervalued relative to the business as well as times when the stock is overvalued relative to the business.
When you examine the performance associated with the above graph you see a vivid example of a “superstock” like the venerable Peter Lynch looked for. Even though the fair value P/E ratio for this example is almost twice as high as the foundational fair value P/E ratio of 15 seen in our previous examples, the earnings growth and long-term shareholder returns justifies it.
Previously I offered the idea that a P/E ratio of 15 was appropriate for companies whose growth rates fell in the range of 0% to 15%. In other words, in addition to the fact that the P/E ratio of 15 has been the average for indices like the S&P 500, there is also a logical and mathematical reality behind its validity. However, although a P/E ratio of 15 was an appropriate valuation to pay for growth of up to 15%, I also pointed out that it did not necessarily indicate the rate of return investors should expect to receive.

Also, the 15 P/E ratio should not be looked at as an absolute, instead it should be viewed as a baseline barometer or reference for fair value. In other words, the 15 P/E is a good starting point guideline to ensure that you are not overpaying and taking too much risk. Consequently, anytime you come across a moderately growing company (5%-15%), whether a blue-chip or even a moderate to high dividend payer that is trading at a P/E ratio above 15, then caution is called for. However, there are certain companies that historically have usually commanded a premium valuation. Sysco and Automatic Data Processing are two examples that come to mind. On the other hand, fair value can be present at higher P/E ratios when faster growth supports it.

The moral of the story is that the primary determinant of what investors should expect as a reasonable rate of return is the company’s actual growth rate of earnings growth. To clarify, the assumption is that if a slow to moderate growing stock is bought at a reasonable P/E ratio of 15, in the long run the investor should expect to achieve capital appreciation that equates to its earnings growth rate. This of course assumes that the P/E ratio at the end of the timeframe being measured is also close to 15. If the ending P/E ratio is higher than 15, then the rate of return the investor achieves will be higher, and vice versa. Also, total returns will additionally include dividends, if any. Moreover, as previously illustrated, P/E ratios above 15 are only justified when earnings growth is also above 15%.
One of the key points about paying attention to fair value is that it positions you as an investor to achieve results commensurate with what the company is capable of generating as a business. If you overpay, the company can generate excellent results, but your returns will not keep up because you paid too much when you originally invested. Peter Lynch summarized this well in his best-selling book “One Up On Wall Street” when he said:

“You can see the importance of earnings on any chart that has an earnings line running along side the stock price. On chart after chart the two lines will move in tandem, or if the stock price strays away from the earnings line, sooner or later it will come back to the earnings.”

Conclusions

From the insights provided by the F.A.S.T. Graphs™ above, the relationships between valuation and earnings growth rates should be clear. They also validate the notion that the concept of fair value, or what I like to call True Worth™, should always be a consideration for investors. Valuation clearly matters, in fact, valuation matters a lot. When stocks are only viewed from the perspective of price alone, the principles behind valuation are easily missed or ignored. This can lead to very expensive investor mistakes.

Although the principles of valuation that the F.A.S.T. Graphs™ research tool is built upon are extremely relevant, they are not perfect. However, if used intelligently they can be a tremendous aid towards assisting investors in making the hard decisions of when to buy or sell a common stock. This is why we refer to them as “tools to think with.” The price earnings relationships that this tool provides should be thought of as barometers or valuation references offered to think about and analyze valuation with. Their real value is in providing investors with an intelligent framework from which to make decisions upon.

As Warren Buffett has said: ”the fact that people will be full of fear, greed or folly is predictable. The sequence is not predictable.” The relevance of this statement implies accepting and recognizing periods of time when markets are behaving irrationally. There’s no need to attempt to rationalize illogical behavior. What makes no sense - makes no sense. On the other hand, there is a great need to recognize crazy activity when it is occurring. Then, and only then, can investors protect themselves from the dangers that exist when irrational exuberance or irrational pessimism rears its ugly head.

Disclosure: Long MA, SCG at the time of writing.

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