

>: A Fundamental Look at Growth Stocks

Monday, November 26, 2007 / *chaos_nantuko*

When it comes to analyzing stocks, its all about the earnings.

The immediate reaction to this information is to look at the Price to Earnings ratio. I still remember when I first picked up the stock market game two years ago. I simply scanned for stocks with a price to earnings ratio of less than 6, with OK dividends, and went with those stocks (needless to say, it wasn't a winning strategy).

The problem with this simplistic strategy is that low price to earnings ratios are usually low for a reason. Similarly, high price to earnings ratios are usually at that level for a reason. Finally, normal run of the mill price to earnings ratios can't be used as an indicator, because they're just that ... normal.

Earnings growth, on the other hand, is much more versatile - if also more objective. It is an estimate of how fast earnings are expected to increase, as a percentage, on an annual basis. Much better. But once again, how do you know if it isn't already "priced in" to the stock? Earnings growth alone can't be used as an indicator for that reason.

So if the price to earnings ratio can't be used alone because it doesn't account for earnings growth, and earnings growth can't be used alone because it doesn't account for how much it's already been "priced in", then together, they should be able to form an accurate indicator, right?

Unfortunately, the most common indicators used to combine these two numbers is also faulty. The company growth ratio - earnings growth divided by Price to earnings - is really useless.

Lets look at 2 hypothetical companies. Company A has earnings growth of 20%, and a Price to earnings ratio of 20. A company such as this could be counted on as having a stable price to earnings ratio, and so would appreciate in value by about 20% a year.

Company B has earnings growth of 50%, and a Price to earnings ratio of 50. Eventually, all growth stocks revert to a "standard" price to earnings ratio as their earnings growth slows down. After 3 years, Company B's earnings would be 3.37 times higher, yet if its Price to earnings ratio decreased to around 20 (a normal level), it would have only appreciated in value by 35%. (3.37 times the earnings, but with only 40% of the previous Price to earnings ratio. So $3.37 * 0.40 = 1.348$. Increased in price by 34.8%. Annually, over 3 years, that's only 10.5%.)

With the exact same company growth ratio, one company appreciates in value by 20% a year, the other by 10.5%. This ratio isn't very predictive. Many people have heard of the PEG ratio, and it's the same story in that case.

So, how do you properly take both the price to earnings ratio, and the earnings growth rate into account? It's deceptively simple.

First, Estimate how many years it will maintain its growth rate, and what the growth rate will be. Take your growth rate as a percentage, and add one (30% growth becomes 1.30). Now take that number to the exponent of the number of years you think the growth will be maintained. If you think it can maintain that growth rate for 4 years, then you would do 1.3 to the exponent 4 ($1.3 * 1.3 * 1.3 * 1.3 = 2.86$). So its earnings will be about 2.86 times higher 4 years from now. Assume that by that time, people are realizing its earnings growth is slowing down, and giving it a more normal Price to earnings ratio of around 20. Multiply how many times higher its earnings will be by 20, then divide by its current price to earnings ratio. Finally, subtract one, and your percentage return over that 4 year period. If the P/E ratio currently is 40, then you'd take the 2.86, multiply by 20 to get 57.2, then divide by 40, to get 1.43. So if a stock maintains growth of about 30% annually, for 4 years, before dropping to a normal price to earnings of around 20, it should make 43% over that 4 year time period. Thats 9.3% annually.

earnings ratio is 43.6.

Expected overall return = $(1 + 0.30)^4 * 20 / 43.6$

Expected overall return = 1.31, meaning a 31% return over the next 4 years. Its actual return will be higher if it maintains the growth for longer, and lower if it fails to meet expectations, but 31% over the next 4 years is a good ball park figure for long term investors. Annually, that's only 7% yearly. Based on some realistic assumptions, Apple can't be expected to beat the market over the long term.

I think Google can maintain its growth for the next 5 years, and I'm expecting a similar growth rate of 35%. Current price to earnings is 52.9

Expected overall return = $(1 + 0.35)^5 * 20 / 52.9$

Expected overall return = 1.695, meaning a 69.5% return over the next 5 years. That's 11.1% annually. Long term investors shouldn't consider Google.

So what stocks do pass such a rigorous evaluation?

JA Solar Holdings Co., Ltd. (JASO) has analysts forecasting strong growth over the next couple years. It's in energy, which I believe is in a long term uptrend. I'm forecasting growth of around 35% to 40% annually for the next 5 years. Its Price to Earnings ratio is currently 42.8.

On the low side, we're looking at 35% growth

Expected overall return = $(1 + 0.35)^5 * 20 / 42.8$

Expected overall return = 2.09. Its price would increase by 109% over the next 5 years, so 15.9% annually.

On the high side,

Expected overall return = $(1 + 0.4)^5 * 20 / 42.8$

Expected overall return = 2.51. Its price should increase by 151% over the next 5 years. Annually, that's 20.2%.

This return could potentially be amplified with the use of long term options (LEAPs), which could realistically put you over 30% annually.

It's all about the earnings. The formula takes how fast earnings are growing, applies a realistic price to earnings ratio to the future earnings, and tells you what type of return to expect over a given time frame. Subjectivity can be minimized by using analyst earnings estimates. The only real flaw is that you have to estimate how long the earnings growth will continue, which is subjective. As such, I'd recommend using conservative numbers for

the time.

Since using the formula can be a bit time consuming, here's some reference points that might save you time.

For 15% returns annually, and assuming 3 years of strong earnings growth before reverting to a normal stock...

A P/E of 20 needs earnings growth of 15%.

A P/E of 25 needs earnings growth of 24%.

A P/E of 30 needs earnings growth of 32%.

A P/E of 35 needs earnings growth of 39%.

A P/E of 40 needs earnings growth of 45%.

A P/E of 45 needs earnings growth of 51%.

A P/E of 50 needs earnings growth of 56%.

A P/E of 55 needs earnings growth of 61%.

A P/E of 60 needs earnings growth of 66%.

A P/E of 65 needs earnings growth of 70%.

A P/E of 70 needs earnings growth of 75%.

A P/E of 100 needs earnings growth of 97%.

A P/E of 150 needs earnings growth of 125%. (BIDU at this point in time)

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