

Predicting Future Stock Market Returns

Keeping it simple

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Most investors are unaware of what actually determines stock market returns. In this paper I will summarize the components of both long and short term stock market returns as well as provide a simple but effective means of predicting them.

Investing has become cluttered with exotic financial instruments (e.g., derivatives, CDOs, ARSs), on-line trading tools and charts, screaming talking heads and other complicating and confusing noise. Breaking through this nonsense will greatly improve your odds of maximizing your returns while reducing risk.

So how can we simplify this complicated and confusing investing landscape? Let's begin by examining what drives the return of an investment in the long-term: *current income (dividend yield)* and *future earnings growth*. When an investor purchases stock in a company, the immediate compensation comes is the *dividend yield* while future returns result from the company's *future earnings growth*.

Now we know a long term investor is seeking *dividends* and *future earnings growth*. If we add the dividend return to the rate future earnings grow, that will be the long term return on the investment. Is this too simple to be true? Let's test our formula.

Dividend yield (DY) has historically averaged 3.1%
Earnings growth (EG) has historically averaged 6.6%

By adding these two figures together, we arrive at 9.7%. Long term historic average market return is 9.8%, which is statistically no different than 9.7%.

There you have it. A very simple equation that explains long term market returns. This is the long term explanation, but it's not a good one for the short term. Instead, short term market returns can be explained by the following equation:

$$\text{Short term return} = \text{DY} + \text{EG} + \textit{Speculation}$$

Speculation is the market's attempt to predict the future EG. We all know that sometimes the market accurately predicts future EG and sometimes it does not. In the long run, however, the actual EG will cause the market to revert to its *true* value. This phenomenon is no better exemplified than by the wise words of the late Benjamin Graham who famously said:

*"In the short run the market is a voting machine.
In the long run it's a weighing machine."*

In the short run investors need to decide whether market speculation is overly optimistic or pessimistic. Unfortunately, we will not know until the future actually arrives, but until then we can gauge the likelihood by measuring speculator expectations. Luckily, history provides us with a simple but effective means of doing this.

The level of speculator exuberance or pessimism can be measured by using the market's current P/E ratio. The P/E ratio is simply price divided by earnings, which has historically been about 14. A P/E above 24 is a very good sign speculators are overly confident; while a P/E lower than 7 is a sign they are overly panicked. The range between 7 and 24 is maintained to allow for the probability the market may be correct in its assessment of future earnings growth or contraction. Once the future arrives, however, future prices tend to revert back to the historical P/E average of 14.

What are we to do with this information? First of all, we should humble ourselves. The unpredictable nature of the markets should cause us to realize that we do not know what the future holds. Therefore we should never attempt to time it by being completely in or out of the market. Instead, we should develop a well thought out strategy that we can stick by in good times and bad.

(Side note: If the market appears overly confident or overly pessimistic we can adjust our portfolio allocation targets accordingly. Such adjustments are commonly referred to as *tactical portfolio allocation adjustments*. CAUTION: Only small tactical allocation adjustments, if any, should be made to your strategy. Dramatic adjustments are akin to timing the market, which has been proven time and again to be a *loser's game*.)

We should use this information to develop reasonable expectations for the future. I will use current market conditions to estimate future stock market returns.

Current DY = 1.76%

Current EG = 5.40%

Reversion to P/E of 14 over multiple years = -1.5%

Projected future stock returns = 1.76% + 5.4% - 1.5% = 5.66%

Given these computations an investor could prudently expect average annual returns of approx 5.5% over the next several years, but what if the speculators are correct? This may very well be the case. If so, the current EG must increase by approximately 2%. This would cause the anticipated return to be:

Projected future stock returns = 1.76% + 7.4% = 9.16%

On a historical basis this total return does not appear unreasonable until you realize that DY is less than the historical DY; and EG is higher than the historical EG. If we instead use the current DY plus the historical EG, we arrive at:

Projected future stock returns = 1.76% + 6.6% = 8.36%

Until the future has revealed itself to us we will obviously not know what the actual long term return will be. However, the prudent investor should be able to expect a long term return of 5.5% with a best case long term return of just north of 9%. We simply cannot predict future returns more accurately than this, but we do know a current P/E of 17 is probably not cause to us to think the market has become overly irrational.

Obviously, unpredictable future events could cause actual future returns to vary significantly from these estimates. What we can say with a very high level of certainty is that markets will continue to be extremely volatile in the short run; and the long term investor will more likely than not be well rewarded for enduring it.

Summary

An estimate of future returns does not need to be complicated to be effective. This relatively simple means of predicting future market returns also allows us to gauge whether current markets may have become overly optimistic or pessimistic, while knowing markets always eventually revert to their *true* value.

In order to deal with the unknown we should each develop a well thought out investment strategy according to our unique time horizon and risk tolerance. Only then can the investor optimize the likelihood of successfully meeting his goals.

Investing is simple, but not easy. In my 15 years of working with investors I have encountered only a small few that have been able to successfully develop, implement, and maintain an effective strategy. If you need assistance developing an investment strategy you can live with I highly recommend you seek the assistance of a fee-only financial advisor with the proper credentials and experience. Unlike the vast majority of financial advisors, fee-only financial advisors will have no conflicts of interest with your own.