Do Not Say You Were Not Warned - Again

"What The Fed did, and I was part of it, wa**s front-loaded an enormous* ***market rally in order to create a wealth effect... and an uncomfortable digestive period is likely now." **- Former Dallas Federal Reserve Governor Richard Fisher** – January 5, 2016**.**

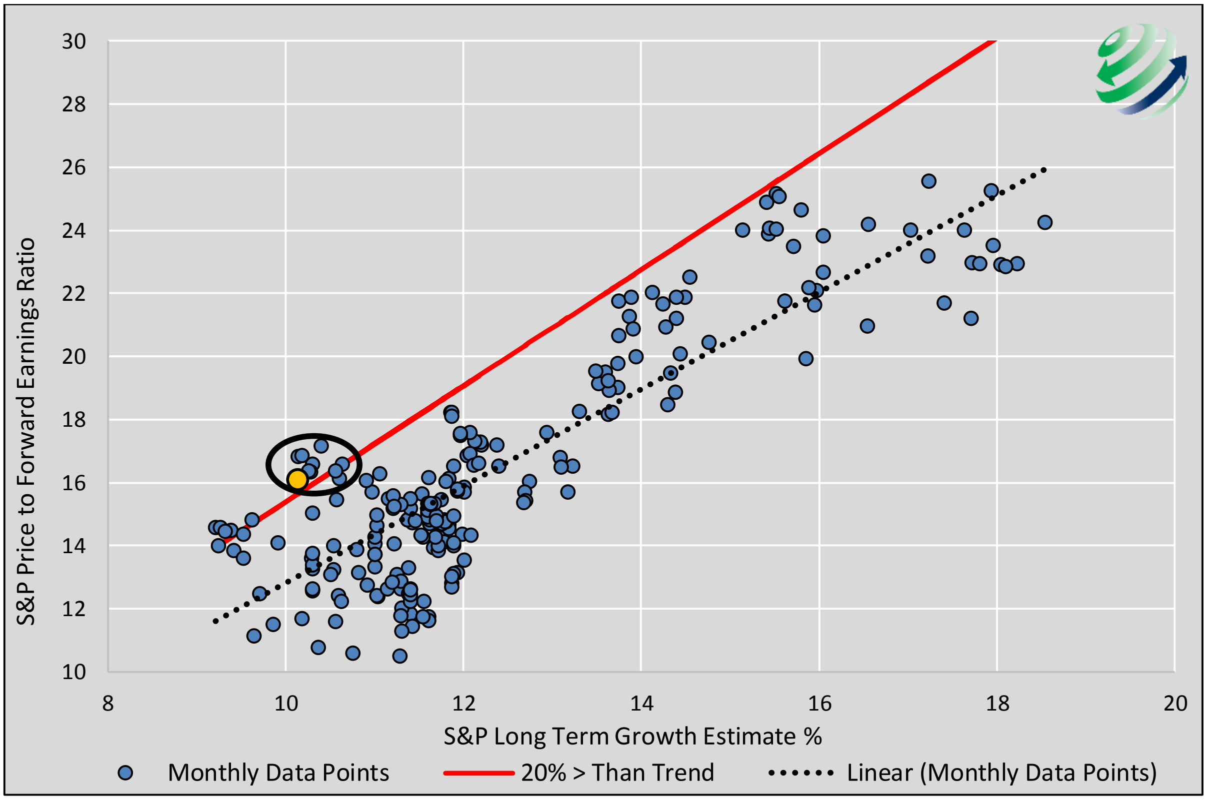
Throughout 2015 we discussed various measures of evaluating equity prices. All of our analysis points to current equity valuations indicating the market is at an extreme and that poor future returns should be expected. As a result, we have not been shy to recommend investors take a more conservative tack with equities. Indeed, equity market price deterioration in just the first three weeks of 2016 has wiped out nearly two years of gains. While we are uncertain if the recent downturn is the beginning of the anticipated bearish period we expect to materialize, we are certain it is imperative investors better understand the poor risk/reward dynamic of holding equities in the current environment.

On the heels of the frank comments from Mr. Fisher, we thought it would be helpful to share yet another type of equity analysis to help visualize the effect the "enormous rally" has had on equity valuations.

Soaring Price to Earnings Multiples

The scatter plot below shows the strong correlation (r-squared = .75) between long-term earnings growth estimates and the price to forward earnings estimates ratio. This ratio is similar to traditional P/E measures but uses 1-year forward earnings estimates instead of historical earnings data. When long term growth estimates are high, investors tend to be optimistic and likely to pay a higher premium or a greater multiple for earnings. The opposite holds true for lower growth expectations.

Long Term Growth Estimates vs Price to Forward Earnings 1997-Current (monthly)



Data Courtesy: Bloomberg

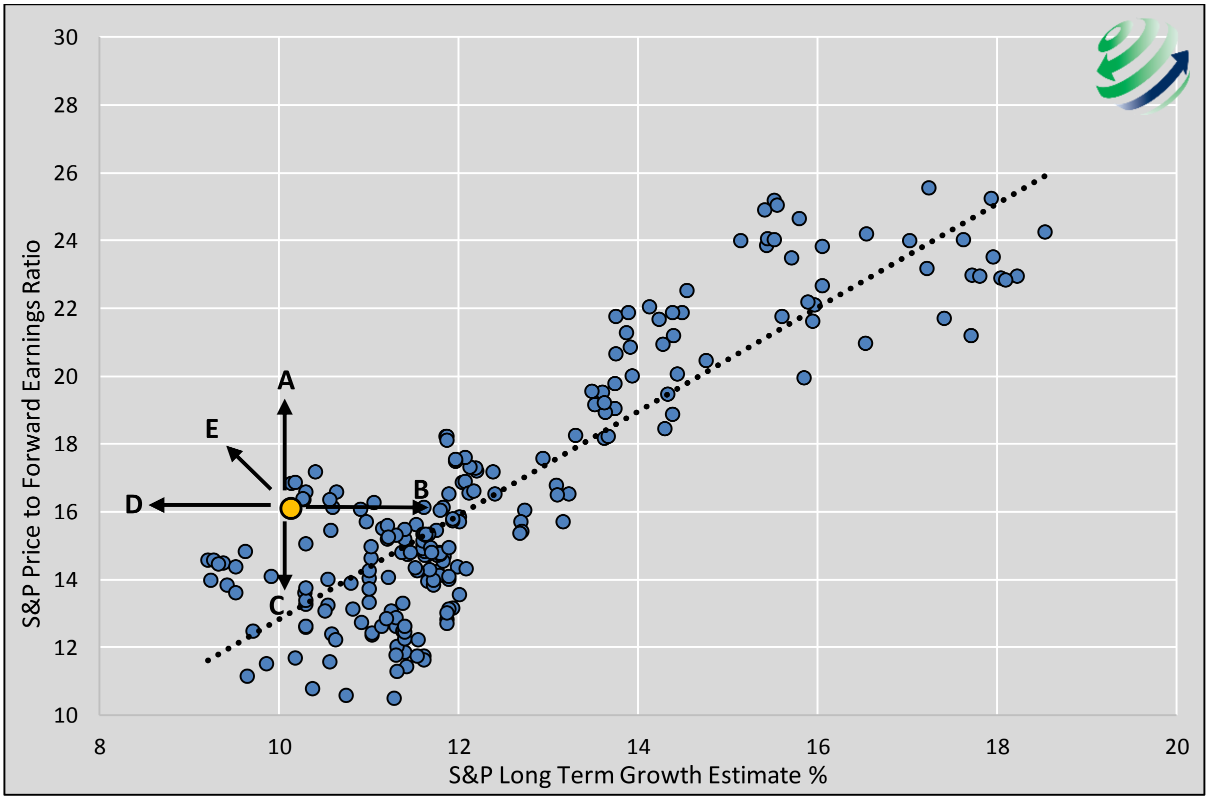
Deeply concerning to us, and apparently now to Mr. Fisher, is the degree of excessive optimism embedded in current prices. The red line delineates combinations of earnings ratios and long term growth estimates that are 20% greater than the dotted black regression line. The yellow dot, representing the most current data, lies slightly above the red line and at levels rarely seen in the last 20 years. The circled cluster of data points nearest the yellow one are all from the prior 9 months.

**Keep in mind as you view the charts- the data only covers the last 18 years, a time period which we would argue contains three of the largest equity bubbles since the Great Depression. Accordingly, observations that stand out as extreme within this data-set are even more extreme when analyzed over longer time periods.

Where will the dot go over time?

The inevitable question is, "Where and how will the yellow dot shift?" In the following chart we add arrows to the scatter plot to help visualize how the location of the dot might change. In reality there are an infinite number of possibilities but we offer four base cases (A-D) in an effort to asses which shifts might be of higher or lower probability.

Potential Data Shifts

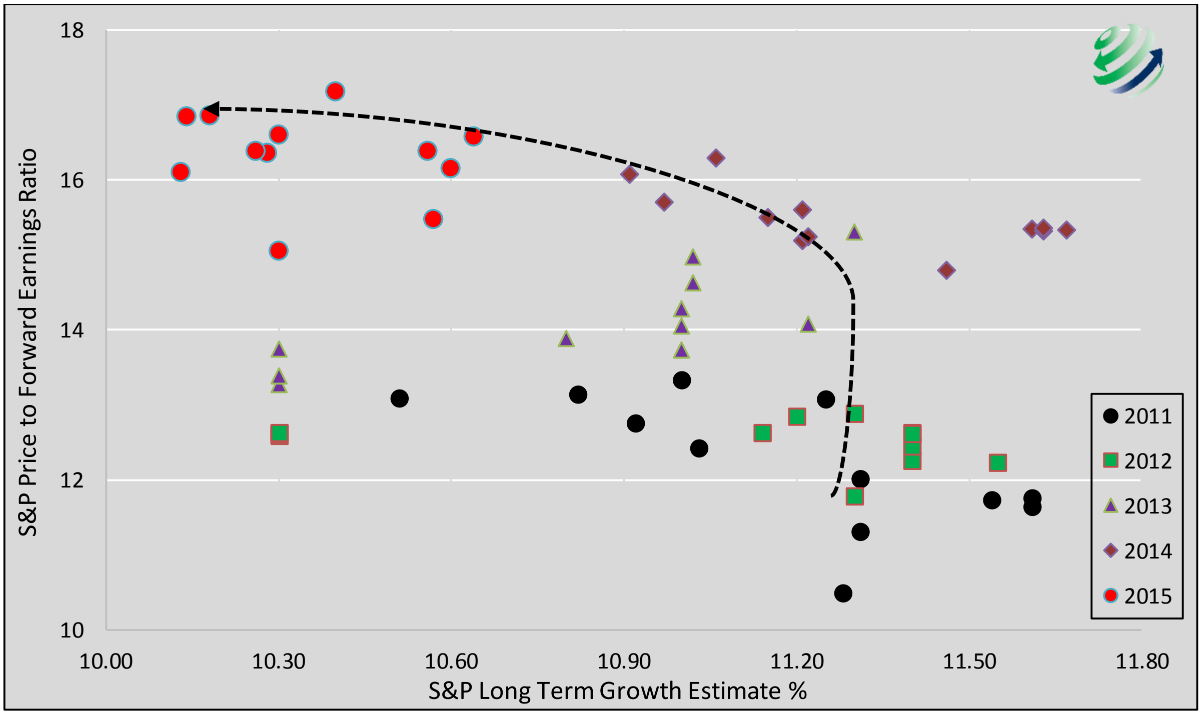


Data Courtesy: Bloomberg

A. This scenario infers prices increase at a faster rate than expected forward earnings, or decline at a slower rate than forward earnings decline. Also conditional is that long term growth estimates remain the same. This scenario leads to further multiple expansion beyond the current levels, which as noted earlier are already historically extreme.
B. This arrow represents a path towards normalization back to the trend line. In this case long term growth estimates rise and investors do not pay a higher forward earnings multiple as they traditionally have. An increase of long term growth rate estimates of 3% currently, absent a change in the price to forward earnings ratio, would bring the market to a fair valuation and a multiple consistent with the last 18 years of data.
C. This arrow presents another path to normalization. Long term growth rates remain stable like arrow A, however unlike arrow A, multiples decline back to trend. In this case a price drop in the S&P 500 of 20% with no change in expectations for one-year forward earnings, would be required to normalize valuations.
D. In this scenario, price to forward earnings multiples remain unchanged despite a shrinking long term earnings growth rate. This would defy historical precedent as reduced long term earnings estimates have usually been met with lower price multiples. The fact that current valuations are already at extremes seems to make this scenario unlikely.

E. This arrow highlights the general direction the data points have traveled over the last 5 years. This is more accurately shown in the scatter plot below which uses yearly color codes to map out the last 5 years of data.

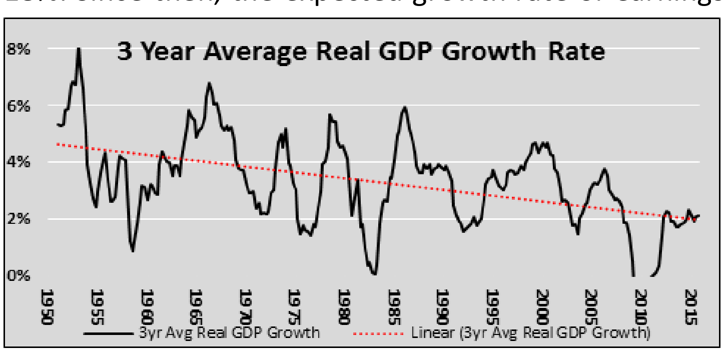
Shifts Since 2011



Data Courtesy: Bloomberg

To help answer the question on which way the yellow dot might shift, we focus on long term earnings growth and the price to forward earnings ratio which are the x and y-axis respectively of the preceding charts.

Long term earnings trends tend to be highly correlated with economic activity. In the year 2000 investors were incredibly optimistic as expected long term earnings growth rates peaked over 18%. Since then, the expected growth rate of earnings has fallen to 10% and currently resides less than 1% above the pessimistic outlooks observed during the great financial crisis of 2008. The trend this millennium should not come as a surprise as GDP growth, the ultimate driver of long term earnings, has been decelerating for years. The graph to the left uses a 3-year moving average



trend line to smooth GDP data. Despite ebbs and flows, the rate of economic growth has been steadily declining for well over 60 years.

Given our stated views on productivity growth declines and the massive level of indebtedness, it is not unreasonable to forecast that actual long term earnings growth will likely follow the GDP trend lower in the future. That does not mean the market cannot temporarily witness periods of optimism where the *expected* growth rate increases. **We are comfortable predicting that long term earnings growth will most likely shift left along the x axis, at least until there is a profound change to the way the government and Federal Reserve promote economic growth.**

Earnings are a function of revenue and corporate profit margins. Our earnings growth forecast in the prior paragraph holds true for revenue growth. As long as GDP continues to trend lower, revenues will likely be challenged as well. Margins, on the other hand, are not as reliant on economic growth. Over the last few years, for instance, margins exploded to record levels despite below trend GDP growth. Layoffs, deficient investment, stock buybacks, mergers and a host of other factors, including suspect measurement, facilitated greater profits per dollar of revenue for shareholders.

Margins have a long history of expanding and contracting within a well-defined range. Currently, margins are at the top end of that range, making further margin expansion difficult to expect. In fact many of the aforementioned methods in which companies increased margins have been largely depleted, which adds to our expectation that margins will contract to more normal levels over the coming years. **Given the declining long term trend in economic growth and therefore revenues, coupled with expectations for lower margins, we are left to assume forward earnings estimates will also decline.**

Declining long term earnings growth forecasts and forward earnings estimates coupled with historically high valuations is a recipe for poor returns. This concoction would most likely result in a shift somewhere between arrows C and D in the chart entitled "Potential Data Shifts" above.

20% Downside and Then Some

A quick glance at the scatter plot would lead one to assume that a 20% decline in the S&P 500 with no change in forward earnings estimates or long term growth forecasts would result in a fair valuation (the yellow dot would follow the path of the C arrow shown above). That is correct, but we would be remiss if we did not mention two other important factors. First, corrections frequently move beyond trend lines and tend to "overcorrect". Based on the data shown above, it is not farfetched to assume the yellow data point could fall an additional 10-20% below the trend line. Secondly, as stock prices decline, the economy may likely suffer as well. Therefore we should also consider the ramification of a decline in forward earnings estimates and possibly long term growth forecasts. **The one takeaway we hope you arrive at is that a decline akin to those seen in 2000 and 2008 is not out of the realm of possibilities.**

Many other valuation measures also predict poor future returns. We urge investors to carefully consider the implications of holding a large equity allocation at this time. Our tag line below is worth careful consideration.

At 720 Global, risk is not a number. Risk is simply overpaying for an asset.

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