



## Market Remains Overvalued

January 3, 2018

by Jill Mislinski  
of Advisor Perspectives

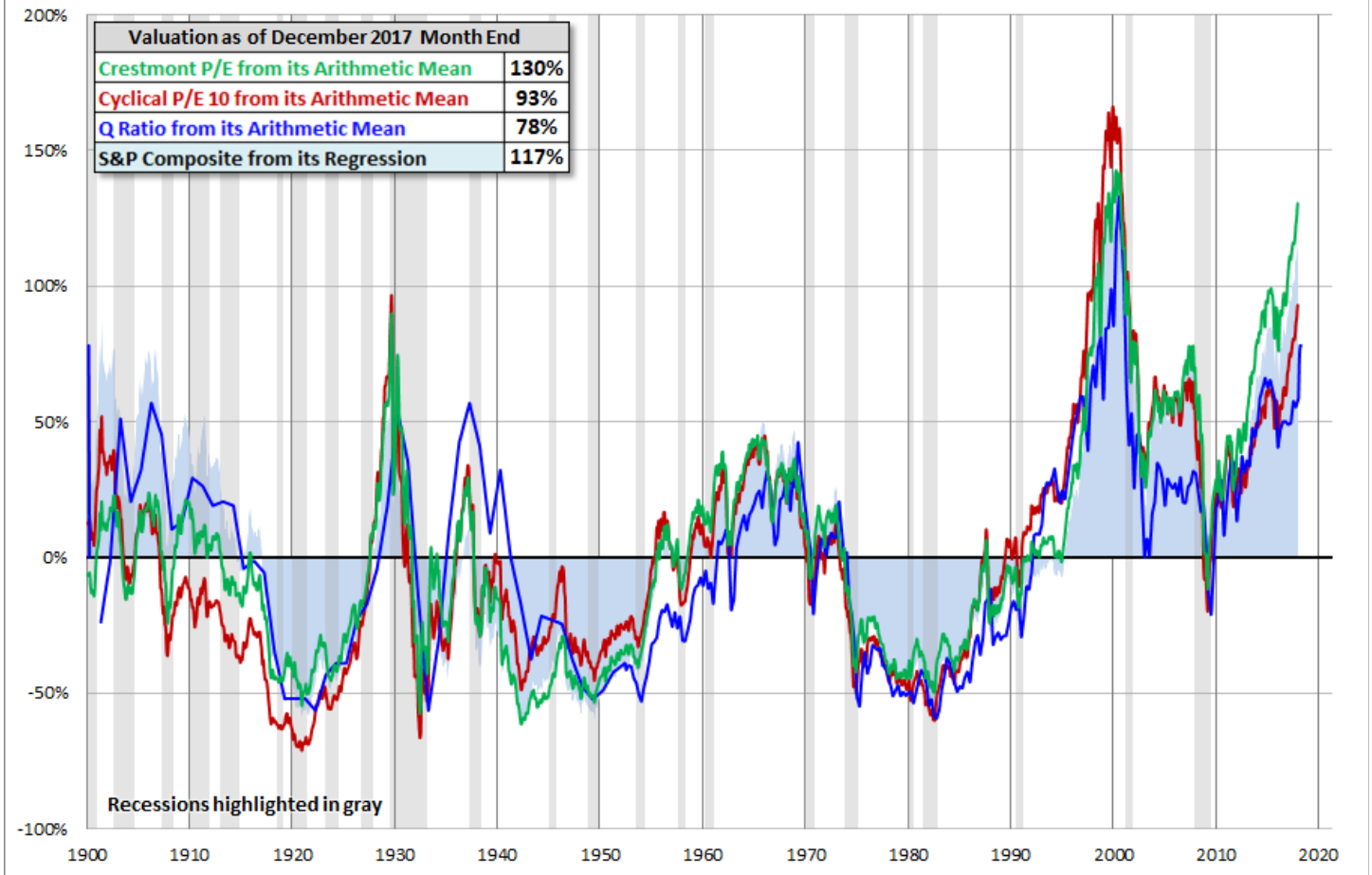
Here is a summary of the four market valuation indicators we update on a monthly basis.

- The Crestmont Research P/E Ratio (**more**)
- The cyclical P/E ratio using the trailing 10-year earnings as the divisor (**more**)
- The Q Ratio, which is the total price of the market divided by its replacement cost (**more**)
- The relationship of the S&P Composite price to a regression trendline (**more**)

To facilitate comparisons, we've adjusted the two P/E ratios and Q Ratio to their arithmetic means and the inflation-adjusted S&P Composite to its exponential regression. Thus the percentages on the vertical axis show the over/undervaluation as a percent above mean value, which we're using as a surrogate for fair value. Based on the latest S&P 500 monthly data, the market is overvalued somewhere in the range of 93% to 130%, depending on the indicator, up from 77% to 125% the previous month.

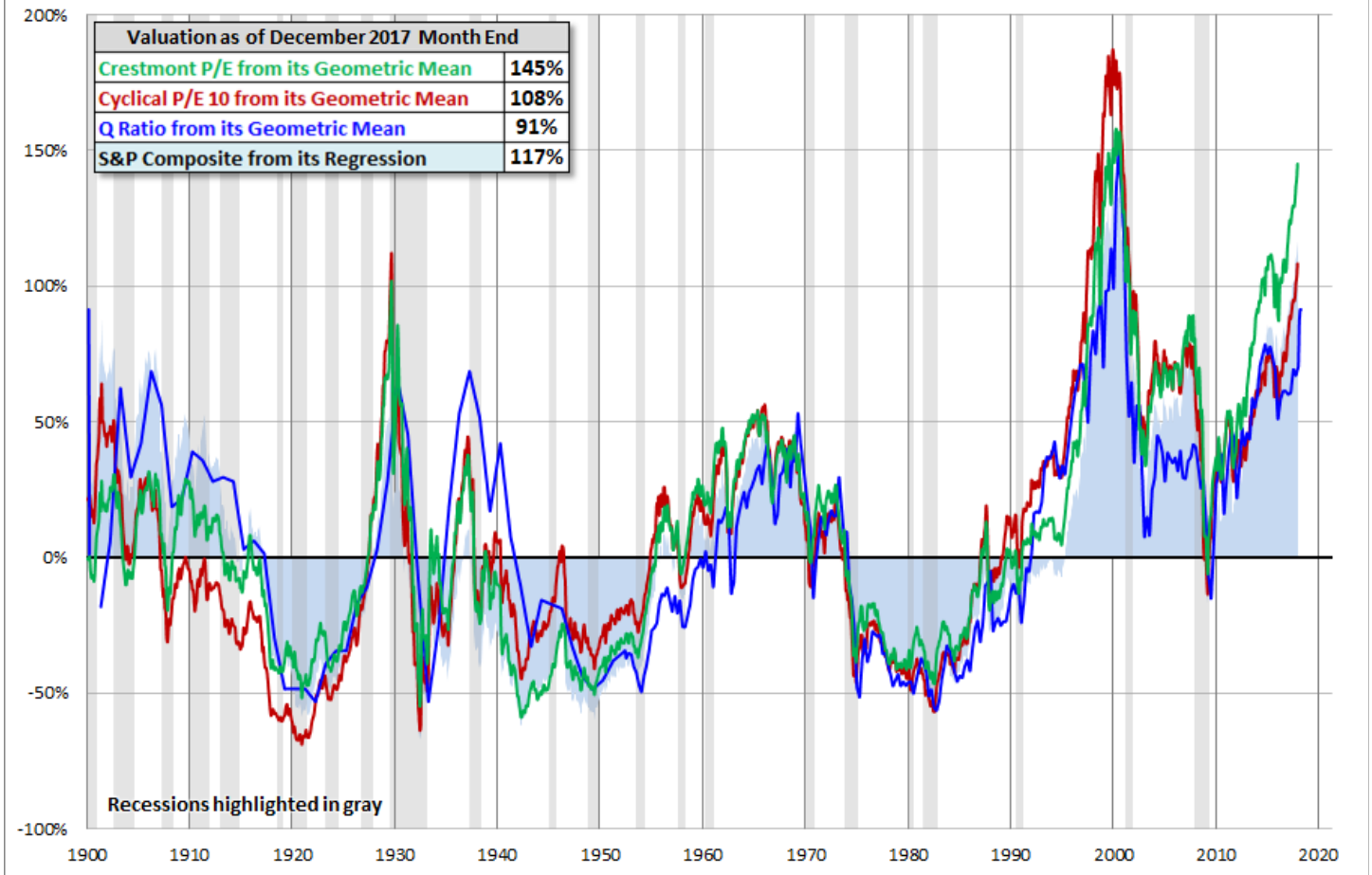
We've plotted the S&P regression data as an area chart type rather than a line to make the comparisons a bit easier to read. It also reinforces the difference between the line charts — which are simple ratios — and the regression series, which measures the distance from an exponential regression on a log chart.

## Q Ratio and P/E10 Adjusted to Their Arithmetic Means with the Real S&P Composite Regression to Trend



The chart below differs from the one above in that the two valuation ratios (P/E and Q) are adjusted to their geometric mean rather than their arithmetic mean (which is what most people think of as the "average"). The geometric mean increases our attention to outliers. In our view, the first chart does a satisfactory job of illustrating these four approaches to market valuation, but we've included the geometric variant as an interesting alternative view for the two P/Es and Q. In this chart, the range of overvaluation would be in the range of 91% to 145%, up from last month's 90% to 140%.

## Q Ratio and P/E10 Adjusted to Their Geometric Means with the Real S&P Composite Regression to Trend

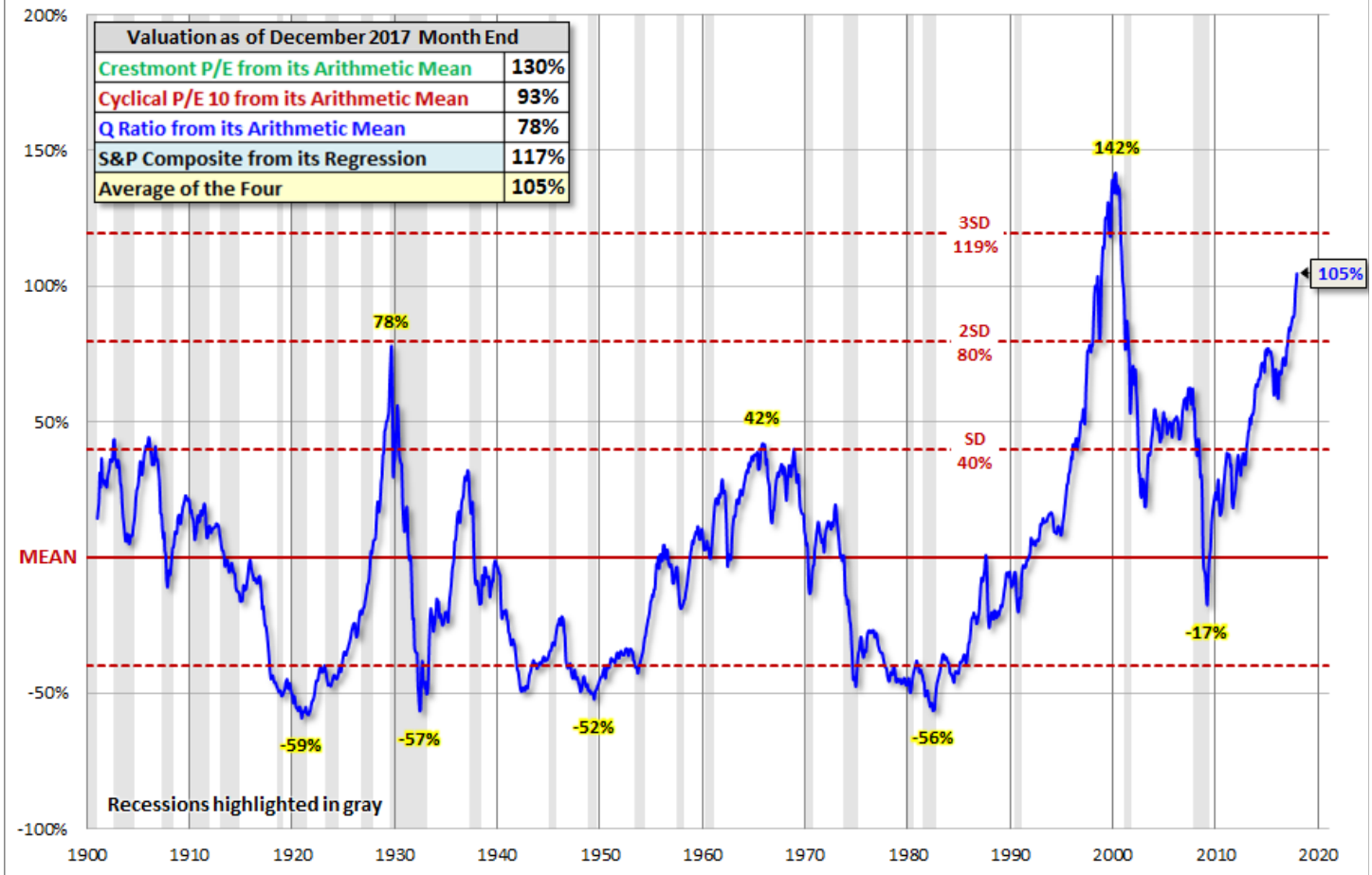


### The Average of the Four Valuation Indicators

The next chart gives a simplified summary of valuations by plotting the average of the four arithmetic series (the first chart above) along with the standard deviations above and below the mean.

At the end of last month, the average of the four is 105% — up from 101% the previous month and at its interim peak.

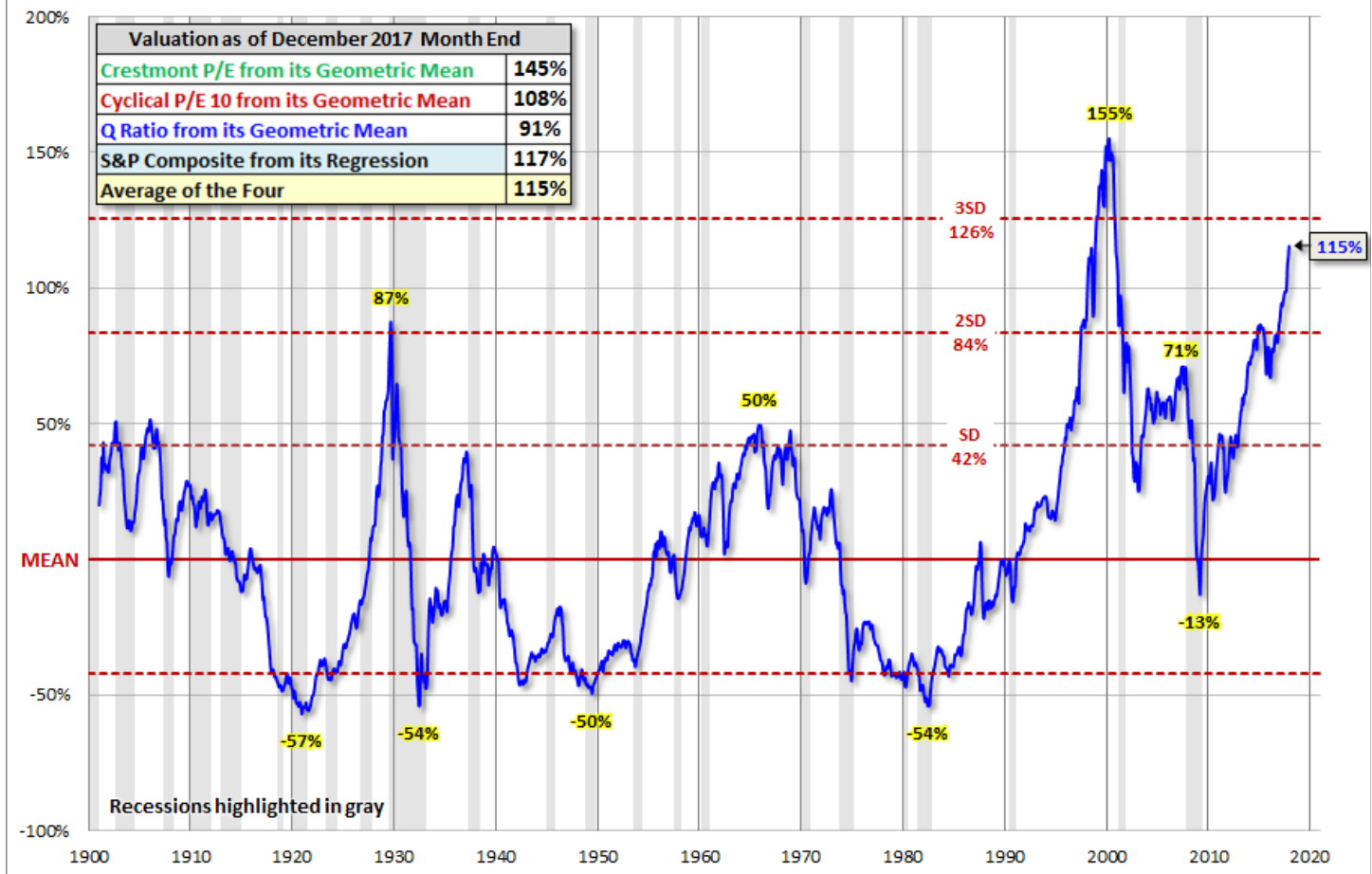
## Average of the Four Valuation Indicators With Standard Deviations Highlighted



Here is the same chart, this time with the geometric mean and deviations. The latest value of 115% was up from last month's 111% and is also at its interim peak.

## Average of the Four Valuation Indicators (Geometric)

With Standard Deviations Highlighted



As we've frequently pointed out, these indicators aren't useful as short-term signals of market direction. Periods of over- and under-valuation can last for many years. But they can play a role in framing longer-term expectations of investment returns. At present, market overvaluation continues to suggest a cautious long-term outlook and guarded expectations. However, at today's low annualized inflation rate and the extremely poor return on fixed income investments (Treasuries, CDs, etc.) the appeal of equities, despite overvaluation risk, is not surprising. For more on that topic, see our periodic update:

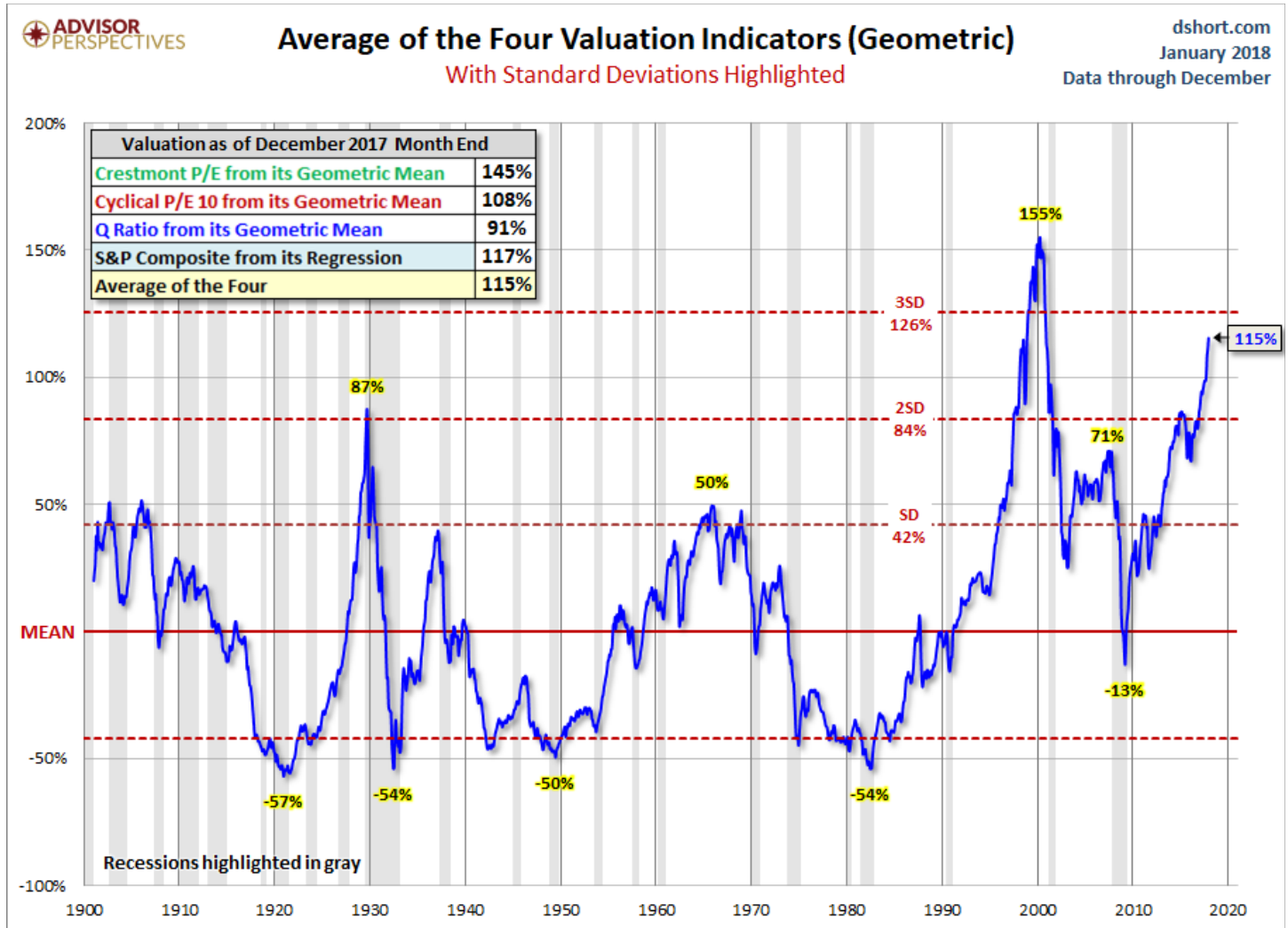
- Market Valuation, Inflation, and Treasury Yields: Clues from the Past

## Market Valuation and Actual Subsequent 10-Year Total Returns

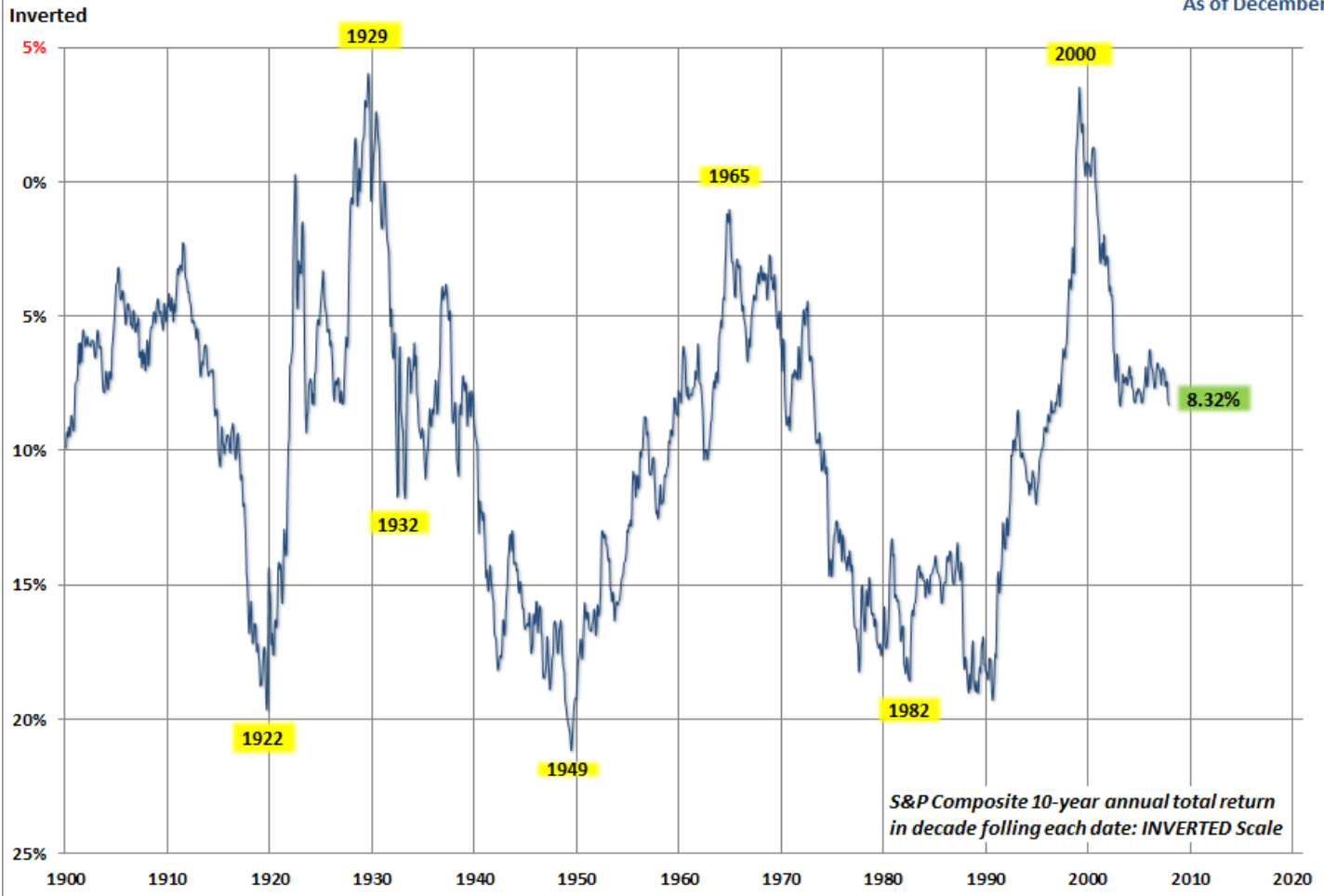
Many of our readers have requested we reproduce a chart by John Hussman that inverts the S&P 10-year total returns. Hussman says "the most reliable correlation between valuations and subsequent returns is on a 12-year horizon, which is the point where the autocorrelation profile of valuations typically hits zero." The correlation of valuations Hussman uses for comparison are at about 90%.

You will notice that nominal returns are used – this is a direct result of a sort of Fisher-effect in which inflation ends up being washed out of the calculation. The nominal growth rate of the economy is highly correlated with the level of interest rates, but also negatively correlated with market valuations, all over the same time period.

Here are the Geometric Average of the Four again and the recreated Hussman charts together.



# 10-year Nominal Total Return



S&P Composite 10-year annual total return in decade folling each date: INVERTED Scale

Points of 'secular' undervaluation such as 1922, 1932, 1949, 1974 and 1982 typically occurred about 50% below historical mean valuations, and were associated with subsequent 10-year nominal total returns approaching 20% annually. By contrast, valuations similar to 1929, 1965 and 2000 were followed by weak or negative total returns over the following decade. That's the range where we find ourselves today. Of course, we also won't be surprised if the S&P 500 ends up posting weak or negative total returns in the 2007-2017 decade, which would require nothing but a run-of-the-mill bear market over the next couple of years. - John Hussman

**Note:** For readers unfamiliar with the S&P Composite index, see this article for some background information.