How Far Can Stocks Fall?

The question repeatedly asked of us last week is how much more can the stock market fall? We don?t have a crystal ball and we cannot predict the future but we can take steps to prepare for it. &#2013266080;Our analysis and understanding of history allow us to use many different fundamental and technical models to create a broad range of possible answers to the question. With that range of potential outcomes we adjust our risk tolerance as appropriate.

For example, in our daily series of RIA Pro charts and the weekly Newsletter, we lay out key technical, sentiment, and momentum measures for many markets, sectors, and stocks. In doing so, we provide a range of potential shorter-term outcomes. We also depend on feedback from other reliable independent services such as Brett Freeze at Global Technical Analysis. His work is exclusively and routinely featured every month in Cartography Corner on RIA Pro.

In this article, we move beyond technical analysis and share a simple fundamental valuation analysis to help provide more guidance as to where the market may trade in the coming months and even years. This analysis can be viewed as bullish or bearish. Our goal is not to persuade you towards one direction or the other, but to open your eyes to the wide range of possibilities.

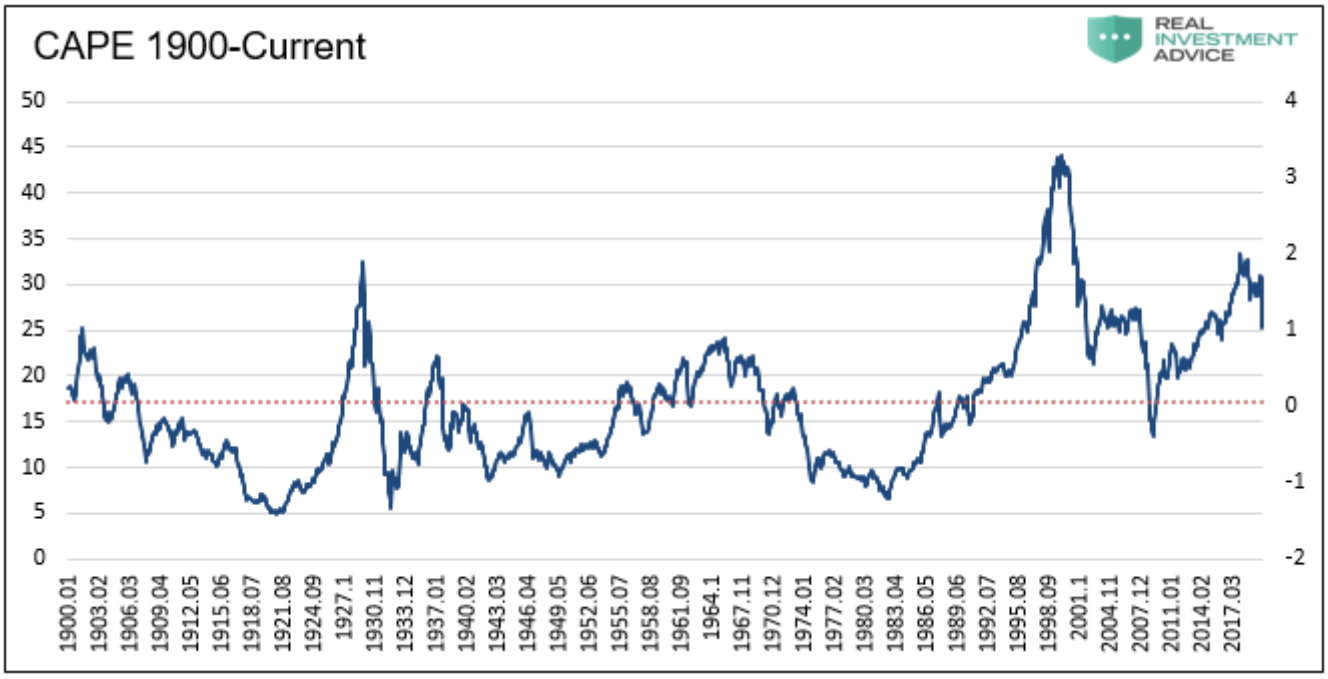


CAPE

The data employed in this analysis is as of the market close on March 13, 2020.

Shiller?s Cyclically Adjusted Price to Earnings (CAPE 10) is one of our preferred valuation measures. Robert Shiller developed the CAPE 10 model to help investors assess valuations based on dependable, longer-term earnings trends. The most common CAPE analysis uses ten years of earnings data. The period is not too sensitive to transitory gyrations in earnings and it frequently includes a full economic cycle.

As shown below, monthly readings of CAPE fluctuate around the historical average (dotted line). The variance of valuations around the mean is put into further context with the right side y-axis, which shows how many sigma?s (standard deviations) each reading is from the average. The current CAPE of 25.36, or +1.10 sigma?s from the mean.



Data Courtesy Robert Shiller

The average CAPE over the 120+ years is 17.06, the maximum was 44.20, and the minimum was 4.78.&#2013266080; &#2013266080;

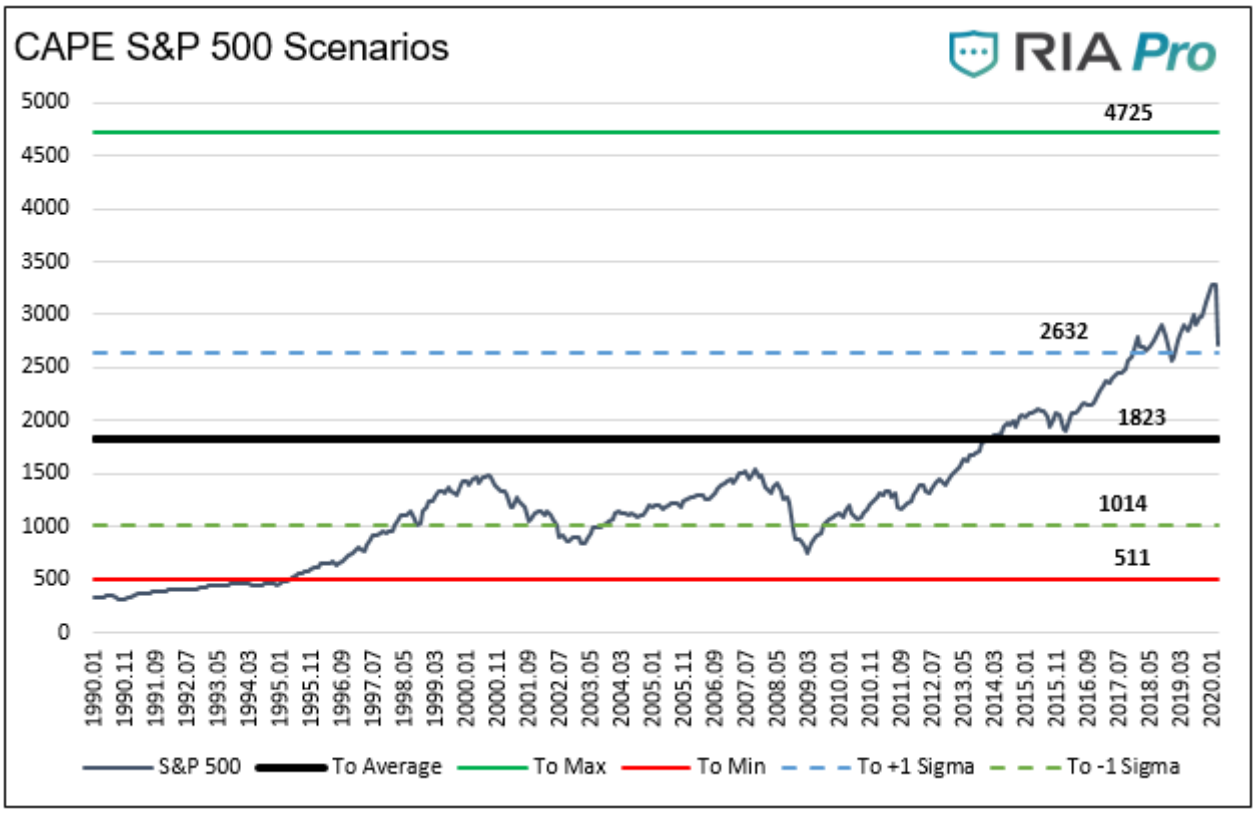
If we use more recent data, say from 1980 to current, the average CAPE is 22.29. Due to the higher average over the period, which includes the late 90s dot com bubble and the housing bubble, the current reading is only .36 sigma?s above its average.

The following tables, using both time frames, provide price guidance based on where the S&P 500 would need to be if CAPE were to move to its average, maximum, and minimum, as well as plus or minus one sigma from the mean.

1900-Current						
	Current	Average	Max	Min	+1 Sigma	-1 Sigma
CAPE	25.36	17.06	44.20	4.78	24.63	9.49
S&P 500	2711.00	1823.72	4724.79	511.44	2632.78	1014.67

1980-Current						
	Current	Average	Max	Min	+1 Sigma	-1 Sigma
CAPE	25.36	22.29	44.20	6.64	30.79	16.86
S&P 500	2711.00	2382.82	4724.79	709.68	3291.72	1802.10

The graph below shows the S&P 500 price in relation to that which would occur if the CAPE ratio went to its average, maximum, minimum, and plus or minus one sigma from the last 120 years.



It is important to stress that the denominator, earnings, includes data from March 2010 to February 2020. That ten years did not include a recession, which, over the 120+ years in this analysis, only happened briefly one other time, the late 1990?s.

The Corona Virus will no doubt hurt earnings for at least a few quarters and could push the economy into a recession. Accordingly, the denominator in CAPE will likely be declining. Whether or not CAPE rises for falls depends on the price action of the index.



Summary

Stocks are not cheap. **As shown, a reversion to the average of the last 120 years, would result in an additional 33% decline from current levels.** While the massive range of outcomes may appear daunting, this analysis is designed to help better understand the bounds of the market.

The S&P 500 certainly has room to trade much lower. It can also double in price and stay within the bounds of history. Lastly, given the unprecedented nature of current circumstances, it may be different this time and write new history.&#2013266080; &#2013266080;

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