

Given the economic shutdown from the coronavirus, future earnings for the S&P 500 are highly uncertain. Some projections are optimistic, but most paint a fairly bleak picture, at least over the near-term. Recently, several companies have disclosed that 2020 is going to be worse than expected in terms of earnings. It's expected that earnings for the aggregate S&P 500 will decline by roughly -16% for the first quarter. If that materializes, the drop in earnings will be the biggest since the second quarter of 2009.

As of this writing, just over 120 companies have reported quarterly earnings, according to Investors Business Daily. Of those companies reporting, only roughly 40% would comment on 2020 earnings, and of these companies, 60% indicated they would not give profit guidance for 2020, or withdrew previous guidance. Still, not all news is bad. There are some sectors of the economy that have held up reasonably well, such as consumer staples.

Ultimately, stock prices are based on underlying fundamentals, such as revenue and profitability. If those fundamentals are not well understood by the market, stock prices tend to become more volatile than normal. We've certainly seen this since the outbreak of the coronavirus and subsequent economic shutdown. The CBOE VIX Index, which measures the expected volatility of the S&P 500 Index based on options, reached as high as 80, surpassing the highest levels seen during the 2008-2009 financial crisis. A VIX of 80 suggests roughly a 5% daily shift, up or down, in the overall S&P 500 Index. This volatility is a direct result of extreme uncertainty about future earnings.

To quantify the potential volatility that we might see over the coming months, we can conduct a simple exercise. S&P provides earnings estimates for the composite S&P 500 Index (these figures are publicly available at <https://us.spindices.com/indices/equity/sp-500>). These estimates are based on "as reported" operating earnings per share and go out to the fourth quarter of 2021, and are provided in Table 1 below. S&P also provides historical (actual) quarterly price-to-earnings (P/E) going back to 1988. With this data, we can simulate potential returns by applying historical P/E ratios to the estimated operating earnings. To simulate the returns, we ran 5000 trials by randomly selecting historical P/E ratios and applying them to the earnings estimates. We assumed a base index value for the S&P 500 Index on the close as of April 27th, 2020 (2878). The results are below:

Table 1	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21
As Reported Index Operating Earnings Per Share Estimates (S&P)	\$140.29	\$136.14	\$136.08	\$142.93	\$154.87	\$163.74	\$170.87
Base Line S&P Index Value (19 P/E ratio)	2665	2586	2585	2715	2942	3111	3246
Simulated Cumulative Returns (base 2878; April 27 th , 2020)							
75 th Percentile	1.77%	-1.19%	-1.15%	3.82%	13.03%	18.94%	24.12%
50 th Percentile	-11.13%	-13.76%	-13.80%	-9.52%	-1.89%	3.65%	8.17%
25 th Percentile	-21.89%	-23.47%	-23.55%	-19.70%	-12.94%	-8.01%	-4.01%

Source: Standard and Poor's, Peak Capital Management.

***Not Actual Results**

The point of the simulation is not to predict future returns (nobody we know has that magical crystal ball). What we want to illustrate is the potential variability of returns. For simplicity, let's assume that S&P's earnings forecast proves somewhat accurate. If we further assume that investors are willing to pay 19x those earnings (which is roughly what they are paying today), then the S&P 500 Index would trade somewhere close to 3246, which is roughly 13% higher than where the index trades today.

Historically, however, a P/E multiple of 19 is above average. Based on S&P quarterly data going back to 1988, the average P/E ratio is roughly 18, with a high of roughly 29 and a low of approximately 11. What the simulation suggests is the while the risk is to the downside in the near-term (i.e. potential losses far exceed potential gains), the opportunity is to the upside longer-term if S&P's forecasts prove somewhat accurate (i.e. potential gains exceed potential losses).

While the simulation above is useful for setting expectations, it illustrates just how variable returns can be, particularly during a pandemic and economic shutdown. We want to remind our clients that we don't attempt to forecast returns as part of our investment process. We seek to manage the variability of returns for potentially better longer-term outcomes.

