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Delta Insights
a weekly commentary on investing

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What to Expect for the Rest of 2019 – Here's the Math

The S&P 500 has recovered a large part of its high-to-low losses of 2018. From high to low the S&P 500 was down nearly 20% last year. Today, the index is about 7% below its all-time high. Year-to-date, the S&P 500 is up roughly 10%. What should we expect for the rest of the year?

Technically, the S&P 500 has climbed back above its 200-day moving average. This is bullish. The 200-day moving average may be the single most popular technical indicator. The rule of thumb is when the index is above the 200-day moving average, the market is bullish and when it is below, the market is bearish. For historical perspective, the S&P 500 fell below its 200-day moving average in late December 2007 and did not rise above until June 2009. If an investor had followed the 200-day moving average technical indicator, they would have avoided the stock market collapse of 2008 and first quarter of 2009. The chart below shows the S&P 500 and the 200-day moving average over the past two years.

S&P 500 – 200-Day Moving Average

When the S&P 500 depreciated by about 16% in December, investors were concerned about the Federal Reserve raising the Fed Funds interest rate a couple of times in

2019. Since the low, the Federal Reserve has signaled that there is a high probability that they will not raise interest rates further in 2019. This change in interest rate outlook is an important factor in why the stock market has appreciated 10% this year.

Stock prices are determined at the intersection of equilibrium buying and selling interest. Stock buyers and sellers, whether implicitly or explicitly, factor in future earnings, interest rates and their anxieties/uncertainties into their buy/sell decisions. The relationship of these factors is captured in the stock valuation formula below:

Stock Valuation Formula

$$\text{Stock Prices Today} = \frac{\text{Future Earnings (est.)}}{\text{Risk-Free Rate} + \text{Risk Premium (anxiety, uncertainty)}}$$

The math is as follows (assuming all else being equal): Earnings rise, stock prices rise. Risk free interest rate up, stock prices down. Risk premium (anxiety/uncertainty) increases, stock prices decline. In the fourth quarter of 2018, future earnings estimates were reduced, interest rates were expected to rise and uncertainty rose. Estimates down, interest rates up, anxiety up were a triple dose of negative for stock prices.

If we invest in the 1-month U.S. treasury bill, we will receive roughly 2.4% annualized return with certainty. Stocks are a risk asset. A rational investor will only buy stocks if they are being paid extra return to take on the risk. Said a different way, for stocks to be attractive, the expected return has to be higher than the risk-free investment return (currently about 2.4%).

The formula above allows us to measure the excess return above the risk-free return rate given the current value of the market. With the S&P 500 at 2,745, the current excess return is 3.8% and is labeled “Risk Premium.” The values of each variable currently are shown below:

$$\begin{array}{c}\text{Stock Prices}\\ \text{Today}\\ \textbf{S\&P 500}\\ \textbf{2745}\end{array} = \frac{\begin{array}{c}\text{Future Earnings (est.)}\\ \textbf{frwd 12-month \$171.37}\end{array}}{\begin{array}{c}\text{Risk-Free}\\ \text{Rate}\\ \textbf{1-Month}\\ \textbf{Treasury}\\ \textbf{2.4\%}\end{array} + \begin{array}{c}\text{Risk}\\ \text{Premium}\\ \textbf{3.8\%}\end{array}}$$

The current risk premium of 3.8% is slightly higher than the average risk premium since 2000 of 3.7%. Getting paid excess return for taking on the risk of owning stocks is a good thing. In 1999, 2000 and 2001, the risk premium was -1.2%, -1.0% and -3.0%, respectively. In other words, the math indicated that investors were likely to receive less than the risk-free rate of return for owning a risky asset. As they say, math does not lie. From the high in 2000 to the low of 2002, the NASDAQ lost over 80% of its value and the S&P 500 declined by about 50%. In 2007 and 2008, the risk premium was 0.4% and 1.2%. Investors who accepted this low level of risk premium in 2007 and 2008 were rewarded with greater than a 50% decline in the S&P 500.

The Fed says they are likely not to raise interest rates this year. The risk premium could decline if the China trade negotiations go well and this uncertainty is removed. The consensus forecast for S&P 500 earnings next year is $189. If we run this information through our stock market valuation formula (keeping both the risk-free rate and risk premium constant), the math says the S&P 500 should be about 3,000 by year end, up roughly 9% from current levels. We will keep you posted on any changes to this math as the year progresses.

Give Us a Call Today

We invite you to give us a call at **(415) 249-6337**, visit www.deltaim.com or email us at info@deltaim.com if you have questions about how we can assist you in managing your investment accounts.

"And a little something for the wife."

Delta Stock Market Dashboard

MARKET SENTIMENT IS

BULLISH

THIS WEEK'S NUMBER IS

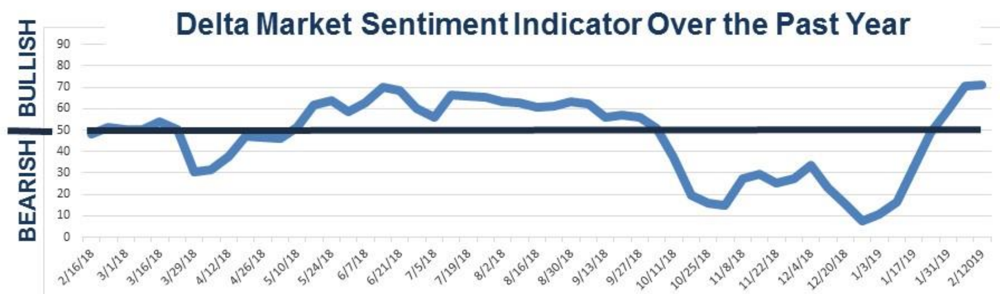
71.1

Our technical indicator increased this week from 70.6 to 71.1

INDICATOR STATISTICS

Consecutive Bullish Weeks:	3
Cycle Inception Date:	1/31/2019
Range:	59.5 – 71.1
Mean:	67.1
Bullish Weeks YTD:	3
Bearish Weeks YTD:	4
*S&P 500	2.0%
*DJIA	2.3%
*NASDAQ	2.4%

** Percentage change during current cycle*



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