What is the VIX?

Why is it called the "investor fear index" and what does it mean?

Often referred to as the "investor fear index," the VIX is technically the ticker symbol for the Chicago Board Options Exchange Volatility Index, which shows the market's expected volatility.

First introduced in 1993, the VIX has evolved over the years and today it is a widely referenced measure of market risk – on a forward basis. That "forward basis" qualifier is important as it calculates future volatility and does not look backwards.

A Calculated Index

The VIX is calculated daily, similar to the S&P 500 Index. But whereas the S&P 500 Index is calculated based on the stock prices of 500 companies (technically there are 505 companies, but that's another story altogether), the VIX uses the price of options on the S&P 500 and estimates how volatile those options will be between the current date and the option's expiration date.

Much like the individual stock prices of the 500 companies determine the value of the S&P 500 Index, the Chicago Board Options Exchange combines the prices of multiple options and derives an aggregate value of volatility – the VIX.

What the Numbers Mean

In very simple terms and from an investor's point of view, VIX values less than 20 are generally associated with less volatile and less stressful times in the markets. On the other hand, VIX values greater than 30 are associated with a large amount of volatility, which increases investor fear – hence the reference to the "investor fear index."

In Real Terms

Although it's usually not referred to in percentage terms, technically the VIX should be because it represents an expected range of movement of the S&P 500 Index at a "confidence level" of 68% – which is one standard deviation of the normal probability curve.

Here is an example: let's say the VIX is quoted at 15. This represents an expected annualized change in the S&P 500 Index of plus or minus 15% – with a 68% probability of being true. In other words, the VIX is predicting with 68% probability that the market will move within a 30% range (plus or minus 15%).

Let's say the VIX is quoted at 30. This represents an expected annualized change in the S&P 500 Index of 30% - up or down – with a 68% probability of being true.

See the difference? Which number elicits more fear?

The Highs & Lows

Theoretically speaking, the VIX can reach any value from zero to infinity (it cannot be negative). In reality, the VIX has never been above 100 since 1990 and the highest value ever recorded was 80 during November 2008 – the peak of the financial crisis.

Although the market crash of October 1987 preceded the VIX, back-testing data shows that the VIX would have peaked at 150 on Black Monday (October 19, 1987).

The VIX hit an all-time low of 9.14 in November 2017, declining consistently throughout the year, which is why technically 2017 was the least volatile year on record.

Since that time, the VIX has remained near historical lows and as of the middle of February, it is hovering right around 18.

What Does It All Mean?

The reality is that the VIX, like the S&P 500 Index, is a data point for investors to consider. It is helpful in painting a more complete picture, but what investors decide to do with this information is a personal decision.

Call me if you'd like to discuss further.