

Using Long Volatility Exposure to Hedge a Portfolio

Investors need to understand that the Cboe Volatility Index (VIX) is not the same as VIX futures, and this has important implications when it comes to trying to hedge a portfolio with a long volatility approach. The VIX index itself is a fantastic indicator of 30-day implied volatility. VIX futures are simply the market's best guess where the VIX index will be on settlement at that point in time.

VIX FUTURES & CONTANGO



JOE TIGAY

Joe Tigay is Managing Partner at Equity Armor Investments, sub-advisor to a volatility-hedged equity strategy at Rational Funds.

Typically, VIX futures trade on an upward slope with the closest to expiration being the lowest and the furthest from expiration being the highest. The VIX cash below the front month contract, the front month contract below the second month, and so on. This brings us to the contango problem in the VIX futures term structure.

Contango is when the futures price is above the expected future spot price. Because the futures price must converge downward to the expected spot price, contango implies that futures prices are falling

over time. This is not structurally a problem and can even be taken advantage of, but it is a major problem for the traditional method of holding a long VIX futures position. In fact, this explains why many products that simply seek to provide long VIX exposure lose a significant amount of their value most years even though the price of the VIX index did not change meaningfully.

The traditional method of holding a VIX future position is a consistent roll from the front month to the second month as the front month expires to

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always maintain a long position. Another method could be simply holding front month until expiration and then rolling to the previous second month contract. Systematically, both programs in a normal VIX futures curve have a built-in buy high sell low strategy. As you can see from the exhibit below, this creates a dramatic decay over time. Over long periods of time, the decay is so much that when you are looking for your protection from the long VIX position, your insurance has decayed away to almost zero.

This contango problem was not lost on us at Equity Armor as VIX market makers. In 2006, when the VIX pit was launched, Brian Stutland entered the trading pit and formed Stutland Equities, which would go

on to become one of the largest electronic market makers trading the VIX. The firm had hands on every order that came through the pit, saw all the flow and gained true knowledge and insight into how the VIX trades; who the key players are and how the VIX reacts to seasonality.

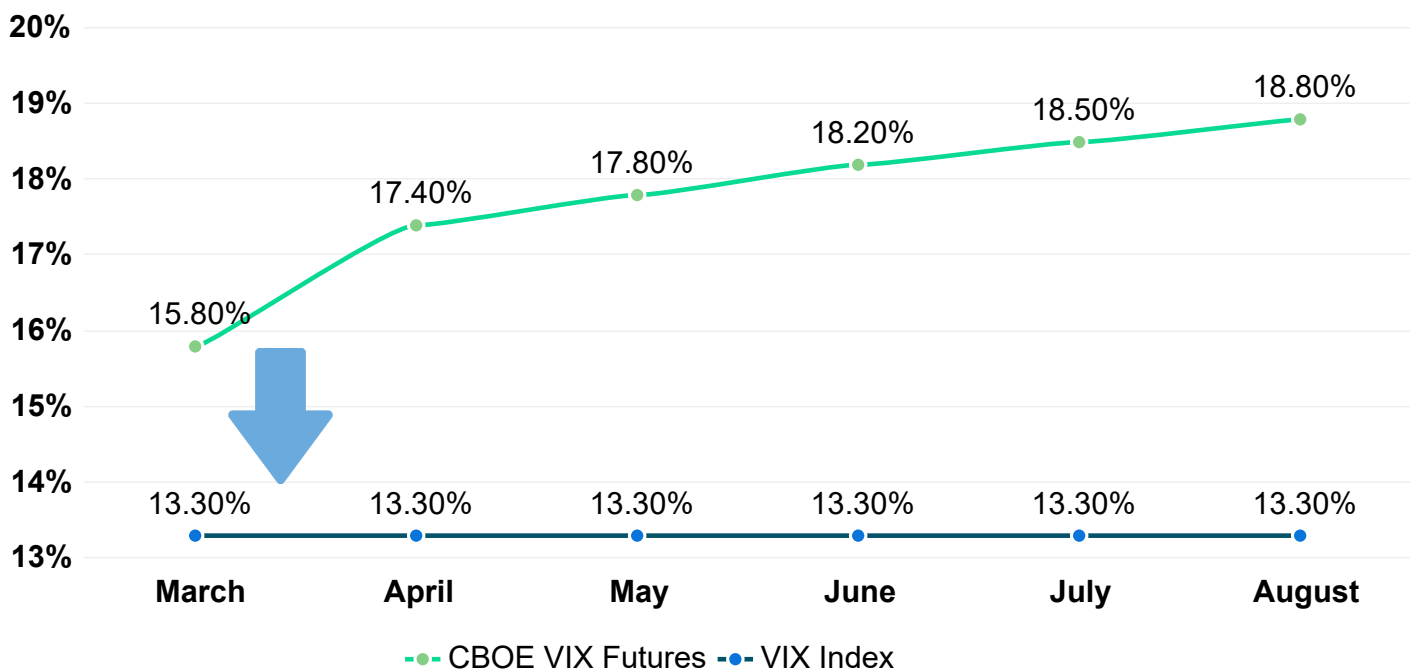
It was in this capacity that we noticed two key insights about how the individual investor was trading the VIX. First, the VIX is extremely popular to trade because it is very highly negatively correlated with the market. Typically, when the market goes down 1%, the VIX goes up 7%, allowing the VIX to be used as an effective hedge if traded correctly. Second, we noticed how poorly the average investor was trading

the VIX. The decay they saw was so dramatic that the cost of the insurance was more than the coverage laid out.

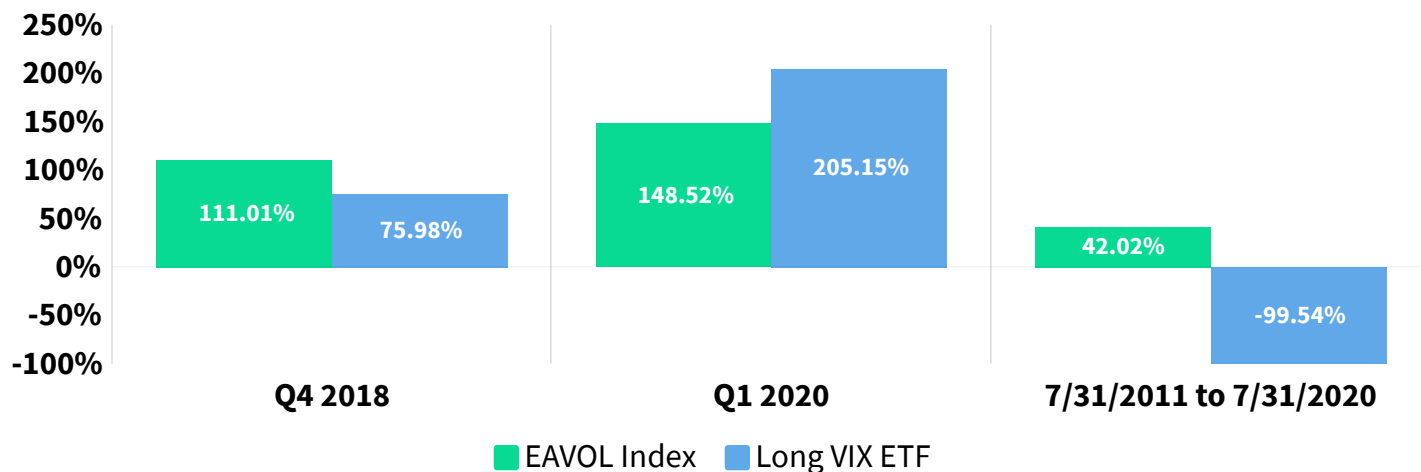
It was this experience which led us to develop our proprietary EAVOL Index, a program designed to closely resemble being long a front month VIX futures contract but without the dramatic decay. The EAVOL Index selects VIX futures positions that present the least potential for time decay while maintaining the highest correlation to VIX Index price movement each day.

This distinct approach has allowed EAVOL Index to deliver when investors needed it most (Q4 2018 and Q1 2020), while avoiding the long-term decay of generic long VIX products.

CONTANGO MEANS THAT VIX FUTURES WILL LIKELY LOSE VALUE EVEN IF THE VIX INDEX DOES NOT.



IT IS POSSIBLE TO GET LONG VOLATILITY EXPOSURE WITHOUT YOUR INVESTMENT GOING TO ZERO OVER TIME.



ABOUT JOE TIGAY

Joe began his career with Stutland Equities LLC. in 2005, working on the Chicago Board of Options Exchange and specializing in electronic market making. In 2008, Tigay became a member trader of the Chicago Board of Options Exchange (CBOE). As a member trader, Joe was a very active market maker in both SPX and VIX options from 2008 to 2012.

Joe utilizes this unique understanding of S&P, VIX options and futures to manage a volatility arbitrage fund. Discussing options, volatility, and market insight, Joe has appeared on Bloomberg, BNN, and has a regular segment on CBOE.tv.

ABOUT EQUITY ARMOR INVESTMENTS, LLC

Established in 2011, Equity Armor helps clients understand risk and attempt to make money in all markets – we manage assets under the Equity Armor Investments LLC umbrella. We also created the EAVOL index, a rules based, dynamic VIX futures strategy.

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