Velocity Composite Fund Score™ Ranking Upgrade

January 2016

On November 12th of this year, Bloomberg Business published an article **entitled "Six Strange things that have been happening in Financial Markets**," below is an excerpt.

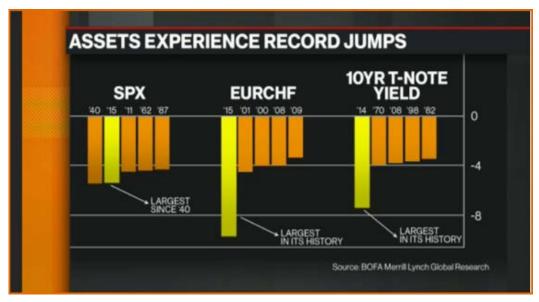
"Interesting things have been happening in the underpinnings of global markets—things that either run counter to long-standing financial logic, or represent an unusual dislocation in the "normal" state of market affairs, or were once rare occurrences but have been happening with increasing frequency."

- 1. Negative Swap Spreads
- 2. Fractured Repo Rates
- 3. Corporate bond inventories below zero
- 4. Synthetic credit is trading tighter than cash credit
- 5. Market moves that aren't supposed to happen keep happening
- 6. Volatility is itself more volatile

While these anomalies might not mean much to the average investor, it's worth taking note that the market is exhibiting remarkably unusual behavior.

In addition to the list above, it's also worth noting that in the last two years we've experienced three statistical anomalies. A four-sigma event, an eight -sigma event and a 20 -sigma event. In case you're unfamiliar with the term sigma, in statistics and probabilities, this lower case Greek letter is used to denote the standard deviation of a distribution, which, as the name implies, is the accepted unit to measure how much an outcome can vary from its average.

How rare are these events? A four-sigma event is only supposed to happen once every 43 years; an eight sigma event is only supposed to happen once in a few billion years. A 20 sigma event, by all accounts, is never supposed to happen. A 20 sigma event is comparable to winning the Powerball lottery ... 21 times in a row! That just doesn't happen because, for all practical purposes, it's statistically impossible. The illustration below shows the assets that have experienced these absolutely absurd moves over the last two years.



So, what's behind these occurrences that should be-- under normal circumstances-- ultra rare? According to a recent article in Business Insider, a financial publication, there are a number of reasons for the increase in these random occurrences. They include:

- 1. Reduced liquidity It's harder for the market to facilitate large buy or sell orders. Therefore large orders tend to move prices to extremes.
- 2. Retail Investors Easier access to risk assets via Exchange Traded Funds (ETFs). Retail investors are more easily spooked than large institutional funds.
- Correlation Increasing trend in what's being called "correlated sell-offs."
- 4. Foreign Exchange Increasing divergent monetary policy from central banks around the world.
- 5. Herd Behavior With so much money chasing returns, sudden market moves suddenly turn large numbers of investors into forced sellers.

Today's markets are much different when compared to markets of even just five years ago. Changes in market structure and unprecedented central bank intervention have resulted in unintended consequences.

Through the years, we've made revisions and updates to the Autopilot system in response to market conditions. Due to the increased volatility in the recent past, changes have been made to the Autopilot modeling methodology during the last few months of 2015 to further reduce risk.

We've completed two upgrades to the Autopilot System, one to the **Ranking Component** and the other to the **Momentum Scoring Component**.

First, the *Ranking Component*. In light of the increase in volatility, we will limit exposure in emerging markets and developed international markets to only one holding within the portfolio. Emerging Markets and International Markets are becoming more susceptible to sharp corrections. We all witnessed this in August when the Shanghai market dropped 20% over just a four day period.

Therefore, the protocol will only allow the highest-ranked emerging market fund or developed international fund to occupy one of the top four positions. All other funds in this equity class will be assigned a value that is less than the rest of the top four funds.

The last upgrade applies to the *Momentum Scoring Methodology*. We have added additional proprietary momentum protocols that will aid in the screening process. This will help to determine the strength of the current trend of each fund relative to other funds in the plan. When investing in funds that are exhibiting strong momentum, there's always the risk of buying at the top of a range. The additional momentum protocols will work in conjunction with the Buy Point Technology protocol to deliver a higher probability score.

During September 2015, the Bull Bear Oscillator turned negative for the first time since 2011, which prompted the Autopilot System to move to a defensive risk posture. Just three months later, in December, it turned positive again, and we were back in the market. This rather quick reversal is indicative of the volatile markets we're experiencing. As a result, we're taking additional precautions to reduce risk.