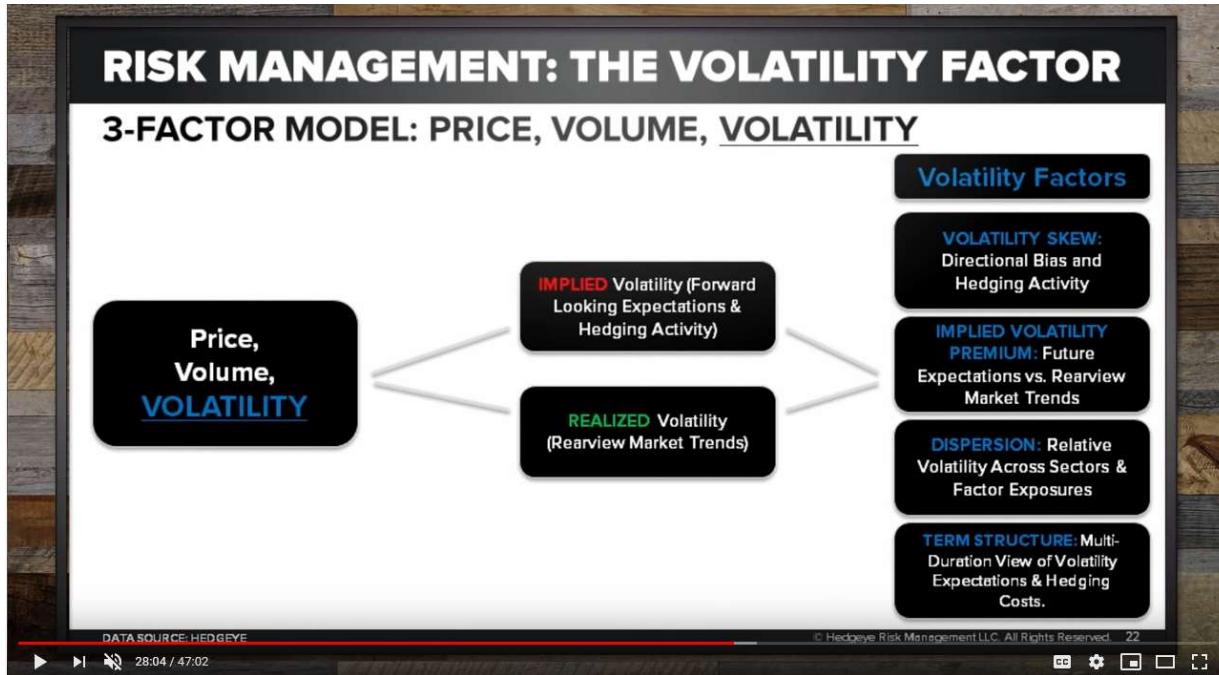


Notes from the Hedgeye Archives:



VIX – why I'd cover my US Equity Shorts and buy one of the few Bullish @Hedgeye TREND signals (XLP) is pretty straightforward – front-month vol of vol signaled immediate-term TRADE overbought at VIX 48-49 and the implied vol discount on SPY moved 1200 basis points from where it was complacently priced on Friday's Pump close; immediate-term downside in VIX to 36.17, not sure we'll get that, but... open minded!

"#Oversold Signals" 03/07/2019

I've been trying to incorporate the fractal teachings of power-laws, non-linearity, and self-similarity to my market timing tools for many years now.

If I change the volatility parameters in my model:

1. The risk range will WIDEN with HIGHER vol inputs and
2. The risk range will NARROW with LOWER vol inputs

"Trending Volatility" 02/13/2018

If we shouldn't confuse the all-time lows in volatility as stability, should we confuse an epic cluster of US stock market volatility (VIX trading in the 98th percentile of the last 5 years of readings) as instability?

Don't expect me to write a book about ***the volatility of volatility*** this morning. I don't have time for that and there's a lot more I can learn about volatility by measuring and mapping it, across asset classes, in real-time.

What we know about the volatility of market prices is that they are non-linear and episodic. We also know that when the volatility of a security's price starts to TREND bullish (from bearish), "investors" in the underlying asset start losing money.

That's why I think one of the most important risk management exercises I can engage in every market day is probability-weighing whether or not a cluster of spiking volatility can morph into a **Bullish TREND Phase Transition** over time.

Just to review some @Hedgeye definitions:

- A) A **Bearish-to-Bullish Phase Transition** in an asset's volatility is bearish for the asset's TRENDING price
- B) A **Bullish-to-Bearish Phase Transition** in an asset's volatility is bullish for the asset's TRENDING price

"Trending Volatility Breakout" 09/11/2018

Within our broadening research realm of volatility observations, if you're using the same data dashboards I'm looking at from the same multi-factor, multi-duration rate of change lens every morning, you'll also note:

1. That there's a big absolute and relative divergence in implied volatility premiums/discounts at the **US Sector** level ... and
2. There's a big divergence between implied volatility premiums/discounts at the **Country Equity Index** level

What does that mean?

1. The SP500's implied volatility PREMIUM (vs. 30-day realized volatility) has gone from +10% to +43% in the last week
2. Tech's (XLK) implied volatility PREMIUM (vs. 30-day realized) has gone from +4% to +69% in the last week
3. REITS (VNQ) implied volatility DISCOUNT (vs. 30-day realized) has gone from -7% to -1% in the last week
4. China's (FXI) implied volatility DISCOUNT (vs. 30-day realized) has gone from -18% to -4% in the last week
5. Emerging Markets (EEM) implied volatility DISCOUNT (vs. 30-day realized) has gone from -9% to -2% in the last week

Still trying to figure out what that means?

1. Falling implied volatility DISCOUNTS are usually signs of rising complacency
2. Rising implied volatility PREMIUMS are usually signs of rising fear and/or hedging (delta hedging)

"Chaos!" 03/31/2009 (written by Daryl Jones)

As market practitioners, we wake up every day with a hunger to find order in the markets. And to Benoit Mandelbrot's (the Father of Fractals) point above, order does not come by itself. Global markets are complex and to some seemingly unpredictable.

In the Early Look today, we wrote:

"Across asset classes, global markets have revealed themselves as being as interconnected across a multiple of interacting fundamental factors as they have ever been. Mathematicians call this chaos theory."

It is our fundamental belief that while markets are complex, they are neither random, nor uniformly unpredictable.

Our idea of applying chaos theory to markets was probably first and most widely used by Bruce Babcock, a Yale graduate, former State attorney in California, and prolific trader of commodities. He wrote as it relates to chaos

theory and markets:

"According to respected authorities, the markets are non-linear, dynamic systems. Chaos Theory is the mathematics of analyzing such non-linear, dynamic systems. Chaos analysis has determined that market prices are highly random with a trend component. The amount of the trend component varies from market to market and from time frame to time frame. A concept involved in chaotic systems is fractals. Fractals are objects which are "self-similar" in the sense that the individual parts are related to the whole."

As outlined in Bruce Babcock's quote above, chaos theory is used to describe the behavior of a system that is constantly evolving, a dynamic system. The stock market is, for its ever-evolving nature, the perfect system for utilizing chaos theory as a framework to analyze and forecast.

Older Post (not sure when")

THE HEDGEYE MACRO PLAYBOOK

Looking to our Tactical Asset Class Rotation Model (TACRM), we see that the sectors and style factors which have tended to outperform in historical instances of #Quad1 are starting to dominate the leader board as far as our proprietary Volatility-Adjusted Multi-Duration Momentum Indicator (VAMDMI) reading is concerned.

Recall that our VAMDMI metric is simply the arithmetic mean of three independent z-scores of volume-weighted average price data, in which the three sample sizes (i.e. short-term, intermediate-term and long-term) accord inversely to the trend in global financial market volatility. The metric is designed to standardize recorded momentum across securities and asset classes with variant betas, effectively normalizing the degree to which marginal investors might have a propensity to buy or sell a given market. Our emphasis on "marginal" is warranted due to the fact that the model is not programmed to be concerned with trailing price performance on longer durations; the velocity of the move is really all that matters as it relates to the proclivity of marginal investors chasing momentum in any given direction...

"Enter the Dragon" 02/17/2010

Let's consider a live position here – shorting the SPY:

1. I have an immediate term (as in today) probability model that shows me max upside to 1103 and downside to 1074.
2. I have a 3-day probability model with a wider range of 1048 to 1103
3. I have an intermediate term TREND (3 months in duration) line of resistance at 1100
4. I have a long term TAIL (3 years in duration) line of support down at 984
5. I have bearish volume signals (yesterday we had +1.8% SPX up day on a down -11% immediate term volume study)
6. I have bearish volatility signals, provided that the VIX holds my immediate term support line of 20.82

So, what do I do with all of that information? I short the SPY with a plan to short more if the top side of my immediate term range of (1103) isn't violated to the upside in concert with a reversal in both my volume and volatility situations.

That's a simple 3-factor model (price, volume, and volatility) that I update every 90 minutes of marked-to-market price action. That's definitely not the only 3-factor model I use. That's simply the one I was using yesterday when I made my decision to 'Enter The Dragon' on the short side of the US stock market.