VSTOXX Reacts Quickly To Euro STOXX 50

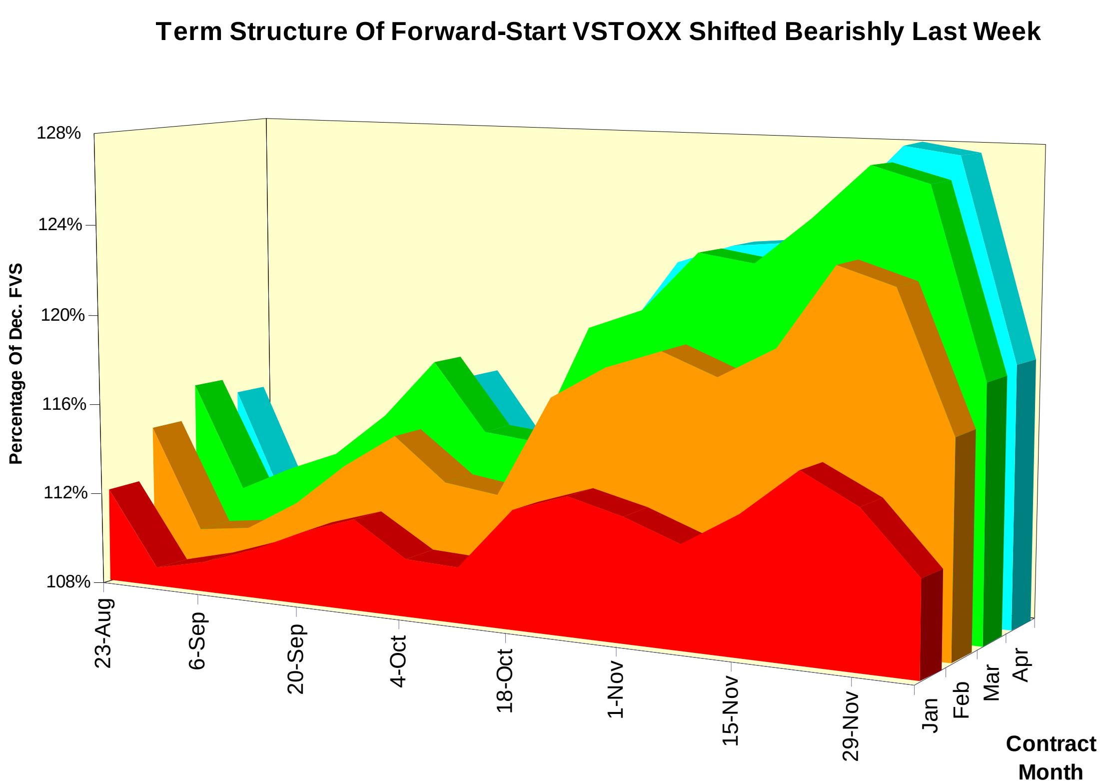
While some have visions of sugar plums dancing in their heads at this time of year, quite possibly the result of excess slivovitz, I have the vision of a world wherein volatility measures can be traded independently of price opinion. Maybe in 2014, but I doubt it: As investors are naturally long stock and not (non-embedded) call options, they tend to ignore call options on the way up and buy put options on the way down.

These actions are combined with those of assorted comedians who have yet to figure out writing put options is a good way to lose a lot of money in a hurry and variance swap traders who put themselves in the position of “paying floating” on variance and now have to hedge themselves dynamically by selling ever increasing amounts of stock into a falling market to create the spikes in volatility seen during every market downturn. If this last point sounds needlessly complex; well, why do you think every financial crisis in our lifetimes involved people whose actions required greater underlying intelligence than they were able to provide?

VSTOXX

The Euro STOXX 50, the underlying asset for ETFs such as the SPDR Euro STOXX Equity fund (FEZ), also underlies a volatility index similar to the VIX, the VSTOXX, and futures thereon. These futures can be added to STOXX-related investments to reduce overall portfolio volatility. In addition, they can be traded against the VIX if you happen to have a trans-Atlantic volatility trade in mind or simply outright.

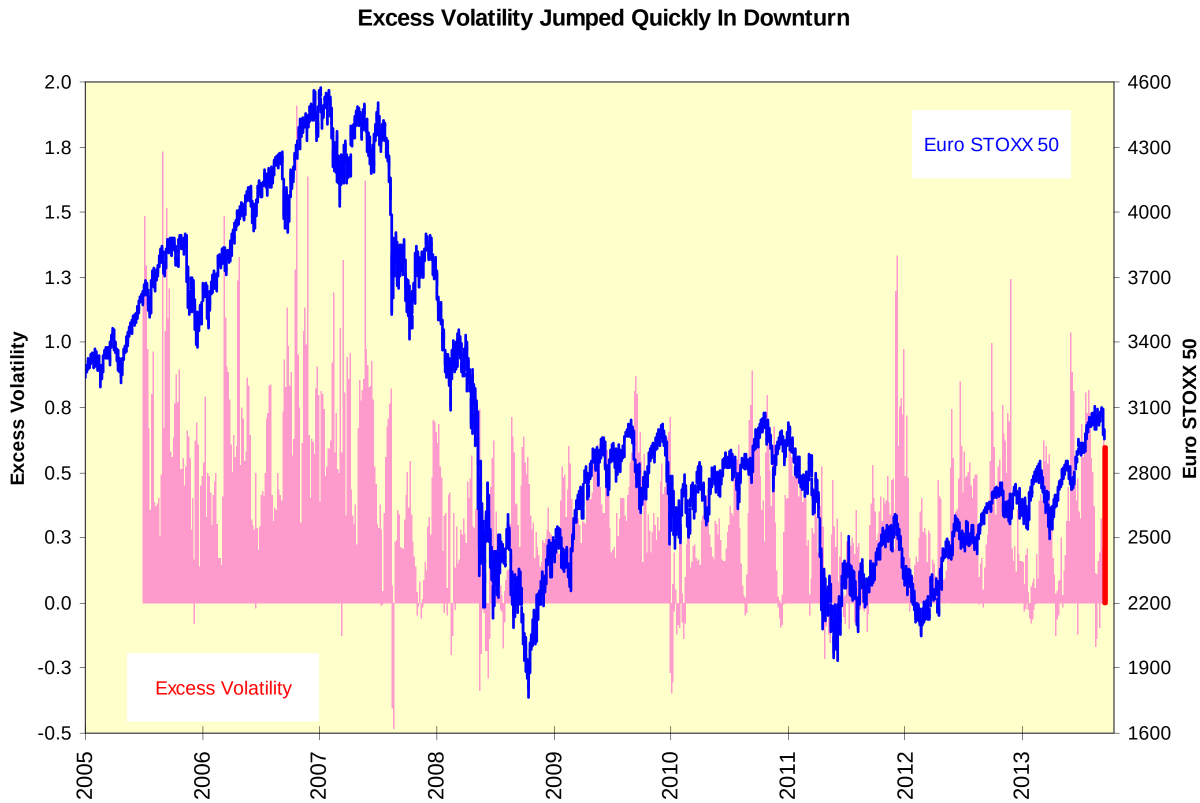
The forward curve of these futures behaves similarly to the VIX’. As the underlying stock index rises, spot volatility levels fall and near-term futures decline relative to back-month futures. The process works in reverse when the stock index falls. The chart below highlights the ratio of January-April VSTOXX futures to front-month December VSTOXX futures from late August onwards. The ratios rose during the September-November rally and declined quickly with last week’s selloff.



Excess VSTOXX Volatility

The never-ending attempt to classify any volatility as high or low is meaningless and therefore fully worthy of the human condition. Implied volatility must be measured against a historic volatility standard such as a high-low-close volatility that incorporates the effects of both intraday range and interday change.

The VSTOXX' excess volatility, defined here as the ratio of implied to high-low-close volatility minus 1.00, jumps and jumps quickly whenever the Euro STOXX 50 index declines. As volatility is bounded on the downside, the jumps are very asymmetric. This is why even a small addition of long volatility to an underlying portfolio can reduce its overall variance of returns.



Finally, please note how far away the Euro STOXX 50 is from its pre-crisis high; that high was reached in July 2007; the U.S. market, in contrast, has been making new highs regularly in 2013. As investors' state of psychological loss is related to the time-adjusted retracement of gain, a different measure of psychological anchoring will be required for the VSTOXX. I will address that in the near future.