Signal, Noise And A Cup Of H.F. Tea

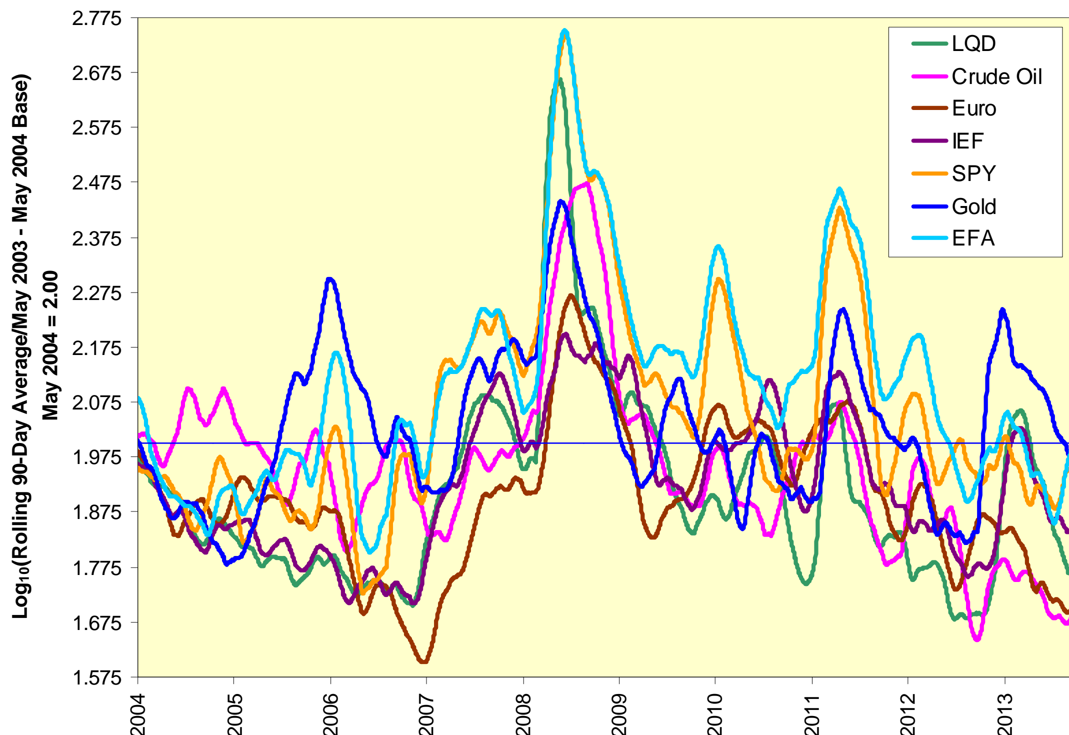
I wish I did not have to be careful what I wished for in this business, but that is simply wishful thinking. A little over seven years ago, I was remarking about low volatility, narrow trading ranges and global policies seemingly designed to keep everything in lockdown mode. The next two years provided more than enough excitement for several lifetimes.

It was not supposed to be this way when our good friends at the Federal Reserve blew the whistle to signal the end of QE and the impending rise in short-term interest rates. We certainly had some price volatility in May-June 2013 and again in January 2014, but the first episode was squelched by FOMC officials running around the landscape assuring everyone they did not mean to be so upsetting and the second episode fizzled out when a series of interest rate increases in emerging markets ended the unwinding of dollar and especially of yen carry trades.

Consider the absurdity of it all: We are in the process of pulling the curtain back on a mountain of bad debt in China, Vladimir Putin is trying to put the band back together in the former Soviet Union, the Eurozone is dancing on the edge of deflation, the U.S. is going to end QE and start raising short-term interest rates not on the basis of any scientific rules but rather on the basis of, "If it feels right, do it," and yet markets are tranquil.

Declining Volatility

The decline in realized volatility can be illustrated simply enough by taking the rolling three-month average of 30-day volatility as it compares to the May 2003-May 2004 one-year period. The results are displayed on a common logarithmic scale. I used the SPDR Trust (SPY), the iShares 7-10 Year Treasury Bond ETF (IEF), the iShares MSCI EAFE Trust (EFA) and spot market prices for gold, crude oil and the euro.



All seven markets' volatility ratios are below the 2003-2004 window; only the EFA's measure is trending higher at the moment. I could add ranges for measures such as the shape of the yield curve or ten-year TIPS breakevens, but you get the point: Markets are moving sideways.

Structural Changes

Markets used to be traded by real people, some of them admirable and some not, but all involved in trying to make their counterparts' lives miserable. They actually served some socially useful functions in so doing, not the least of

which was pushing market to identifiable support and resistance levels and seeing whether long-term players came in to buy the lows or sell the highs. Floor traders and specialists contributed to this misanthropic venture by running stops to shake out the short-term players. All of that activity generated publicly visible price signals telling producers and consumers where the price bounds were.

More importantly, slow execution times and high execution costs forced traders to focus on economic signals and prices trends as opposed to the noise created by a stream of low-cost orders coming in a high frequency. These longer-term positions had to be established with some measure of knowledge about the market involved, and that took time and effort.

High-frequency trading (HFT) can be done in the absence of fundamental information or even technical analysis as it was known and practiced forever. It can exist in a Brownian motion vacuum of no signal and a lot of noise; indeed, I have suggested HFT practitioners could be just as happy plying their craft using a stream of random numbers and gouging each other's eyes out in a true zero-sum fashion. Outside traders could be allowed into the party, but why would they want to go there?

The HFT world can and does produce a huge volume of activity, and that makes the exchanges and suppliers to the industry very happy. If they are happy, I am happy. At the end of the day, though, all of this activity can produce gains and losses but very little economic information as a waste product. This is a loss to society, one that does not get addressed enough. Between central planners masquerading as central bankers and HFT activity going on without producing economic signals, markets are not producing the signals necessary for risk assessment and the efficient allocation of resources.