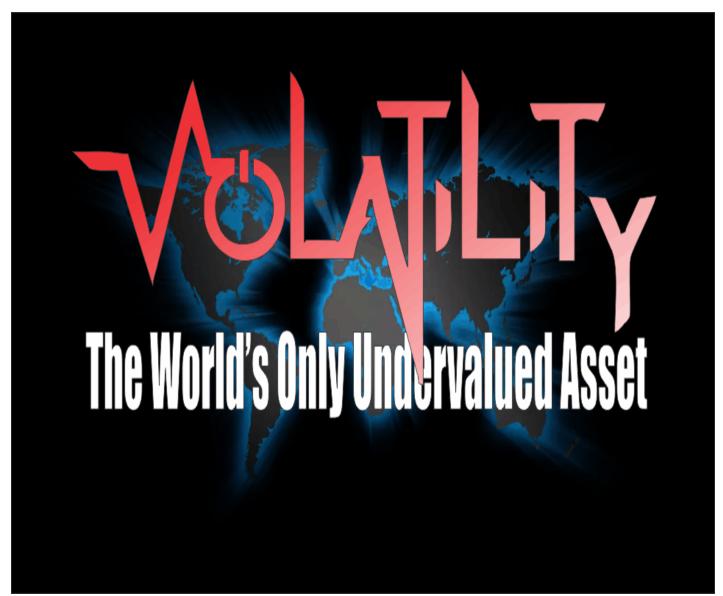


Volatility: The World's Only Undervalued Asset Class



I?have argued?that risk is under-priced because in large measure of the structural changes in the markets and participants positioning. Risk is an ever-present condition that cannot be eliminated, though it can be shifted through time and redistributed in form. In today's market many believe that they have achieved protection over risk, but they actually are becoming its servant. And when investors and quant strategies such as risk parity and volatility trending are all increasingly on the same side of the volatility boat, the odds favor that the boat likely will tip over. Black Monday -- Oct. 19, 1987 -- came out of nowhere. The Indices were in a bull market and many saw no reason for a decline. At that time (and on that day), the markets lost more than 20% of its value as volatility advanced to an all-time high of 150 based on the VXO index, which preceded the VIX index. It was caused by a broad adoption of portfolio insurance and represented the first modern-era crash that was driven by machine feedback loops. It won't be the last. A longtime acquaintance of mine provided these thoughts after attending the recent Grant's Interest Rate Conference. His concerns should be familiar, as they echo mine that have been voluminously mentioned in my

Diary over the last two years: I have made the point many times over the last several years that I thought the structure of the market was such that it couldn't really decline, it could only crash. In the last year or so I have been able to put some meat on the bones of that idea based on data from various people. After the recent Grant's Conference, I shared the thoughts from one of the speakers who had tallied up the data to show that there are various strategies that mimic portfolio insurance and were sizable enough to create a similar outcome. Cole's paper goes into detail about that, and other factors, and I think that anyone who has any exposure to the market -- either by having money in it or because you participate in our economy (which is to say, everyone) -- needs to understand the points made in this report. Just to share a few thoughts to wet your whistle, he notes that what we have been seeing lately has created a situation whereby, "Responsible investors are driven out of business by reckless actors. In effect, the entire market converges to what professional option traders call a 'naked short straddle...a structure dangerously exposed to fragility." He then adds, "Volatility is now the only undervalued asset class in the world."?The Price for Business As Usual: Cole goes on to describe the "global short volatility trade" as, "any strategy that derives small incremental gains on the assumption of stability in exchange for substantial loss in the event of change." One of the perverse reasons why a strategy as destined to fail as this is continues is because it can work longer than one would think that it should, and then participants pile in thinking that the naysayers are delusional. Cole adds,

"Many investors, and even practitioners, are ignorant or in denial that they are holding a synthetic short option in their portfolio. In current markets, there is an estimated \$1.12 to \$1.42 trillion in implicit short volatility exposure..."

He then describes what happens to folks who are in this boat where they all happen to be "short gamma."

"When large numbers of market participants are short gamma, implicitly or explicitly, the effect can reinforce price direction into periods of high turbulence."

In other words, if the market starts down, everybody has to try sell at the same time, which is precisely what happened in 1987. **The Frequency Illusion:** Cole then makes a side comment about algos and computerized trading that I thought was very important:

"Markets are not a closed system. The rules change. As machines trade against machines, self-reflexivity risk is amplified. Ninety percent of the world's data across history has been generated in the last two years. It is very hard to find quality financial data at actionable time increments going back past 20 or even 10 years. Now what if we give all the available data, most of it extremely recent, to a machine to manage money? The AI machine will optimize to what has worked over that short data set, namely a massively leveraged volatility trade. For this reason alone, expect at least one major massive machine learning fund with excellent historical returns to fail spectacularly when the volatility regime shifts...This will be a canary in the coal mine."

As an addendum to my friend's input, I'm providing this link to? *MarketArmor*, ?which offers up a more detailed analysis and warning, "In the Shadows of Black Monday -- "Volatility Isn't Broken... The Market Is." It reads in part:

"The Global Short Volatility trade now represents an estimated \$2+ trillion in financial engineering strategies that simultaneously exert influence over, and are influenced by, stock market volatility....In nature and markets, when randomness self-organizes into too perfect symmetry, order becomes the source of chaos. A reflexivity demon is now stalking modern markets in the shadows of a false peace...? and could emerge violently given a rise in interest rates. Non-linearity and feedback loops are difficult for the human

mind to conceptualize and price. The markets are not correctly assessing the probability that volatility reaches new all-time lows in the short term (VIX<9), and new all-time highs in the long-term (VIX>80). Risk alone does not define consequences. A person can engage in highly risky behavior and survive, and alternatively a low risk activity can result in horrible outcomes. Those who defend and profit from the short volatility trade in its various forms ignore this fact.Do not mistake outcomes for control... remember, there is no such thing as control... there are only probabilities."

Be forewarned and please read MarketArmor's assessment of market structure and positioning over the weekend when you get some free time. It will open your investment eyes.