Lessons From Experience

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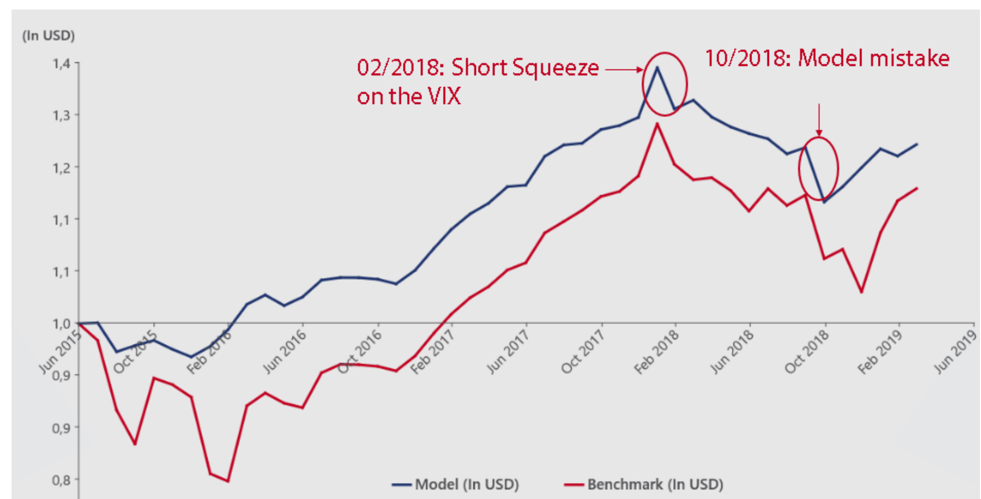
TrackMacro ™ is a software tool providing equity risk signals in 40 countries

TrackMacro made two significant mistakes since its launch in June 2015. However, it still managed to outperform world equities, bonds, and most absolute return strategies, on total returns and on risk adjusted returns.

Mistake 1: TrackMacro did not foresee the short squeeze on the VIX in February 2018.

Mistake 2: TrackMacro overweighed the world trade rule conflicting with the inflation growth mix in October 2018.

Graph 1. TrackMacro Live NAV. Global Equity Portfolio, GDP weighted.



Source: Gavekal Intelligence Software

Has the system learned from the past? Is it currently in a better position to face similar challenges, or not?

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The Risk of Short Squeeze on the S&P Volatility Futures Market (VIX)

The February 2018 VIX spike surprised world equity markets, as rarely has happened before. The origin was purely technical, from a side market- namely the ETF/ETN investment vehicles tracking the VIX on the long side or on the short side.

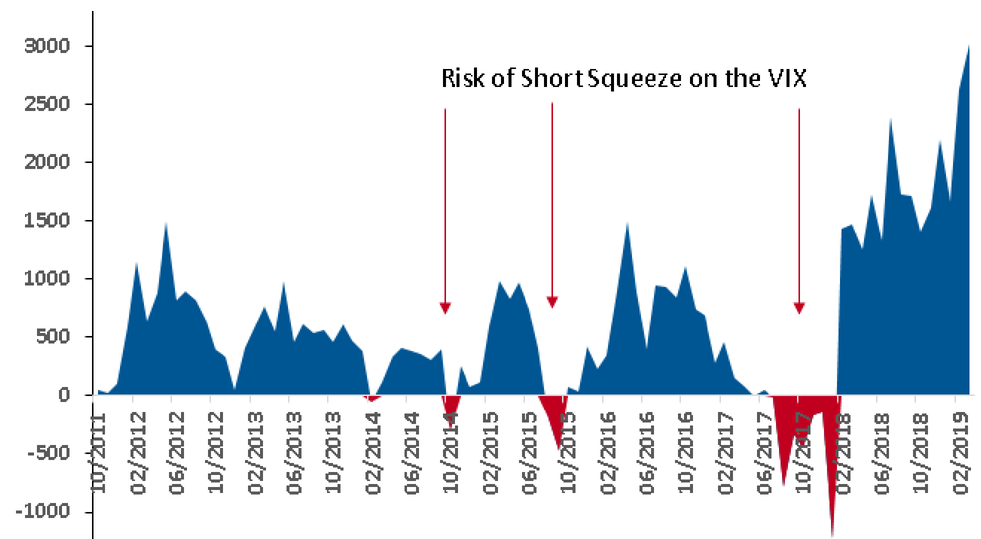
A systemic risk emerges when the net VIX exposure implied by ETFs turns negative. If the VIX spikes for whatever reason, then the nominal value of short ETFs collapses, and ETF managers must rush to buy back VIX contracts on the futures market for hedging purposes. By doing so, they create a destabilizing positive feed-back loop.

The more they hedge, the more they push the VIX higher, the more they destroy their own market value and require further hedging. The VIX becomes uncontrollable and propagates its shock to equity markets futures and cash.

TrackMacro does not follow ETF markets and is therefore sensitive to short squeezes like any other market participant. This is the reason why we are tracking the net ETF VIX position separately.

Graph 2 below shows that the risk of a short squeeze on the VIX propagated by the ETF/ETN market is simply inexistent today. The net VIX ETF market position is long more than USD 2.5bn.

Graph 2. Net VIX exposure of the top 10 VIX ETFs/ETNs in million USD



Source: Gavekal Intelligence Software. Bloomberg data. ETF Bloomberg tickers: XIV, UVXY, SVXY, VXXB, TVIX, ZIV, VIXY, VXZB, VIXM, VIIX

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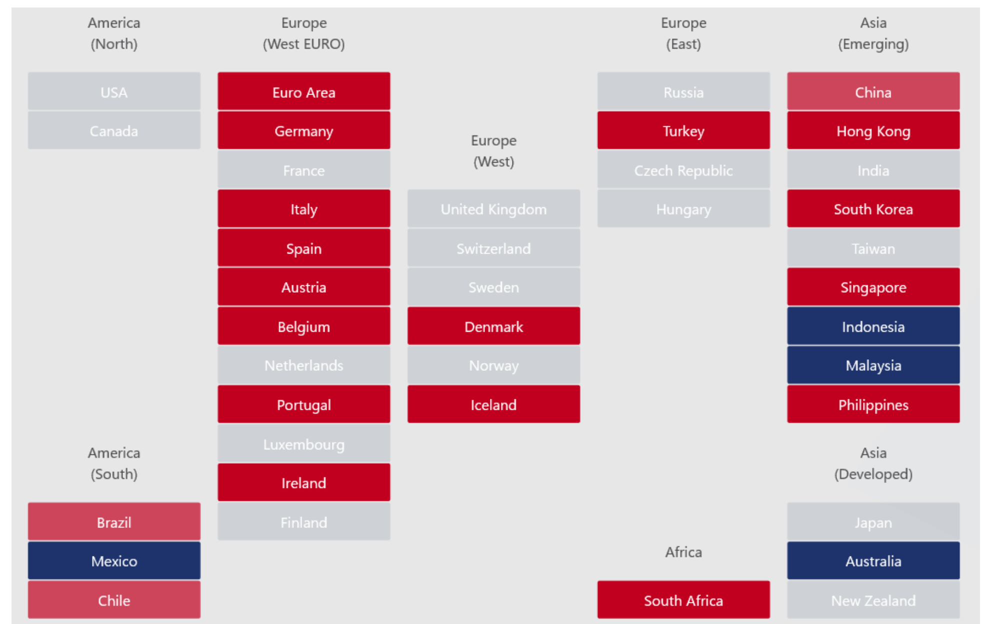
The Risk of Overweighing the World Trade Factor for Equity Risks

TrackMacro's second mistake, which came in October 2018, is more fundamental. It comes from a trade-off between conflicting variables, tracking local activity on the one hand, and global trade on the other hand.

At the end of September 2018, Track Macro issued two conflicting signals:

1. The Four Quadrants' investment rule, crossing inflation and growth on a country by country basis, turned out to be rather negative. Deflationary booms favor equity earnings, which was the case for only four countries (in blue). Inflationary bursts, on the contrary, are deeply negative for equities and favor government bonds (in red). The grey color in the graph below signals either a lack of statistical significance in either growth or inflation trends, or a conflicting mix between the two factors leading to inconclusive equity value for risk.

Graph 3. TrackMacro Four Quadrants Rule as at September 30, 2018



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2. World trade is a macro variable tracking the external demand, on average, for all countries. The Word Trade Rule, contradicting the Four Quadrants' rule, had turned very positive for three months, favoring the risk-on mode.

TrackMacro's conclusion was positive for equities on 30 markets out of 40. If the World Trade rule had posted a neutral signal, instead of a strong positive one, only 8 markets out of 40 would have shown a good equity value for risk. TrackMacro's global equity exposure would have dropped from circa 75% to 20%.

TrackMacro turned out to be right on both signals, and wrong on the trade-off conclusion:

1. The third-quarter earnings season was on track to have been the worst for stocks since 2011.
2. World trade posted a strong October acceleration at +1.54% (within the top 15% quantile since 2000) published three months later by the Netherlands Bureau for Economic Policy Analysis.

World equity markets hesitated at the beginning of the month, then dropped 7%, pulled down by big technology stocks (Facebook, Amazon, Netflix and Alphabet).

Should TrackMacro Revisit its Optimization?

The seven macro rules tracked by the system have been optimized by artificial intelligence on three markets over long history: the US, Germany, and Japan. The optimization has then been applied out-of-sample to 37 other markets.

We tested the opportunity to learn from experience and to reduce the weighing of the World Trade rule in the neural network. The results for the last 3.5 years since launch are as follows: (i) it slightly improves 7 countries, (ii) it slightly deteriorates 12 countries, and (iii) the global impact is negative.

The lesson from this experience is that the pre-launch optimization among TrackMacro factors is still valid. TrackMacro can be better optimized locally, but at the expense of its global robustness and global performance.

It is a universal scientific constraint that you can't get the best of both worlds. Models with high local success rates always end up collapsing when facing systemic risks. Only top-down models making numerous small mistakes can protect from large shocks.

TrackMacro belongs to the second model category.

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