SMN: Commodities Continue to Power Performance

Bottom-up selection from a broad universe

HAMLIN LOVELL

MN Diversified Futures Fund has received The Hedge Fund Journal's CTA and Discretionary Trader Award for Best Performing Fund over 3 and 4 years ending in December 2023, in the Trend Follower (AUM \$100m to \$1bn) category.

SMN does not predetermine any top-down weighting for any asset class because individual markets must earn their place in the portfolio by demonstrating stronger trends. But since inception in 1996 a wide variety of commodities have made a larger performance contribution than seen in many other CTAs.

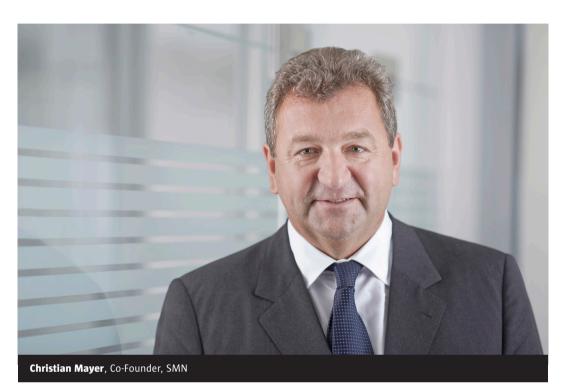
Commodities have been consistent winners for 2021, 2022 and 2023, with contributions from longs and shorts. Longs in natural gas and shorts in palladium were helpful in 2021, while short rubber was a strong market in 2022. Phelix electricity (physical electricity in Germany) was a long winner in 2022 and a short success in 2023. Long sugar was profitable in 2023 and long cocoa in 2024.

Cocoa and sugar both had huge rallies and huge corrections over the past few years, which illustrates how the models can both capitalize on a trend and manage risk when it reverses. "If the price moves develop in a steady enough way, all our systems can kick in, and they can make a larger contribution," explains SMN Co-Founder, Christian Mayer. "Equally for both sugar and cocoa, risk management systems kicked in, and reduced the position size to below full exposure during the exponential end phases of those price trends. That has also reduced losses when the trends reversed," says Co-Founder, Michael Neubauer.

Some shorter-term strategies may have traded cocoa and sugar long and short in 2024. SMN has no bias to being long or short of any market, but as a medium to long-term trend follower, it takes some time to reverse course. Looking at calendar years, SMN has traded some markets in both directions, as sharp reversals in the price trend could lead to immediately cutting and reversing. "For re-entries in the same direction, we have implemented temporary out-of-position phases for successive trend confirmation," says Managing Director, Joseph Waldstein, who sits on SMN's management board along with Mayer and Neubauer.

Market additions and deletions

Sugar and cocoa are fairly well-known commodities, but roughly 50 markets have been added over the past 10 years, across classic, structural alpha and synthetic categories. For instance, short term interest rates have been added within the classic bucket.





Michael Neubauer, Co-Founder, SMN

Markets can move between SMN's definition of "global" commodities, in the classic category, and "local" commodities, which account for most of the structural alpha markets. "Dutch TTF Natural Gas moved from local to global after the Russian invasion and is now very liquid with no sanctions or price cap. Meanwhile ethanol moved down from a global to a local structural alpha market, and we even stopped trading it at one stage," recalls Neubauer. SMN now trade Bitcoin futures, where liquidity can vary a lot, but they are not the first to trade a new market. "We need some data to add a market, and some younger markets do not have enough price history," says Mayer.

Bottom-up allocation

The average split between market types has been 50% classic, 25% structural alpha and 25% synthetic

markets, but as with asset class splits this naturally varies with bottom-up signals and there can be no position in some markets. "We place a heavy weight on trend identification and sometimes have no position in a market. This is more of a philosophical position," explains Mayer.

Just as there is no preset weight for the three types of markets, there are no asset class risk budgets. Currencies have been making a stronger contribution, but this has not led SMN to increase the overall currency asset class weighting. "Market selection is instrument by instrument, market by market, based on the strength of trends and considering cross correlations. The individual market volatility and overall risk regime can also be relevant," says Waldstein.

The Japanese Yen decline had been one of the strongest trends, driven by both the price movement and the positive carry versus the USD. Higher carry created a more pronounced trend in the futures market than in the spot market. "The shape of the forward curve already includes the carry as expressed by roll yield, so there is no need to trade it separately and we can profit from it," says Waldstein. Of course, as is the case with any form of carry trade, it may suffer from sharp and fast reversals, as was the case during August of 2024.

Variable volatility

Long-term volatility is targeted at an average of 15% but as with market selection it is partly a function of the opportunity set.

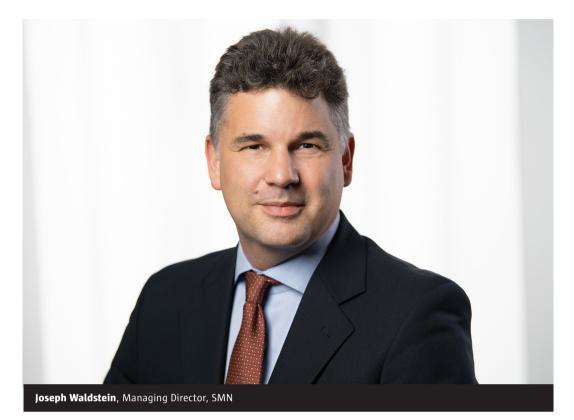
"If we detect more trends and size positions larger, we will on average have more volatility," says Waldstein, but typically volatility is fluctuating around the target. Sudden changes in the volatility level occur mostly in case of deleveraging caused by stop-losses hit such as the recent turmoil in the equity markets in July and August. Vice versa, the volatility levels are typically increased in a steady continuous way, sudden increases are not common.

SMN are not inclined to increase position sizes to get volatility up to the 15% long term target. "A back tested simulation of the current portfolio would have actually been close to the 15% volatility level," reveals Waldstein.

The reason why volatility had been lower at the beginning of the year is that cross correlations, within the portfolio, were low. "Our correlation overlay, designed to detect correlation clusters, had no impact on the portfolio in the first five months of 2024. We had not found many correlation clusters. However, during and after the August sell-off, the correlation overlay has started to have an ever-greater influence in position sizing," says Waldstein.

Correlation and risk overlays

The correlation overlays are conceptually different from a traditional correlation matrix approach that



implicitly assumes all positions are in the same direction and of the same size. SMN's fluid correlation clusters are determined on a bottom-up basis, using SMN's position size, long and short positions, and not assuming long only exposure to the markets.

The clusters are also agnostic about where correlation hotspots and heatmaps might emerge. They could cover any range or combination of asset classes or SMN's three market categories.

Though the individual structural alpha markets are deliberately designed to be uncorrelated on a long only basis, it is possible that a pair or group of long and short positions within the structural alpha market bucket might appear to have a correlation, considering the position size and directions.

SMN was certainly not complacent about the low levels of correlations during the first half of the year. Due to the pure systematic nature of SMN's investment philosophy, the detection of correlation clusters can flag up warnings and alerts on a daily basis and could swiftly lead to consequential risk reduction, which has been the case in the late summer.

Risk off overlay

In contrast to the correlation clusters, the risk on/risk off market regimes indicator is more top down and binary, for the whole portfolio.

The risk and correlation indicators can operate independently or sometimes throw up warnings in conjunction. They have often been helpful in reducing exposure around challenging periods, such as the March 2023 mini-banking crisis, but naturally they have not always worked. During the February 2018 "Volmageddon," neither the correlation overlays, nor the risk on/risk off indicator flagged up any early warnings. "We lost 15% in one week. This is partly due to the nature of trend following models. Our exposure peaks during the middle part of a price trend, and we need to give early trends time to develop. We can therefore have more exposure going into a shock. And the risk on/ risk off indicator can take time to register a warning, so shocks can always be a problem," says Waldstein. The drawdowns SMN saw in 2018 and 2019 were however well within the range of statistical expectations.

During the August 2024 sell-off, the stop losses were the first line of defense and were responsible to unwind the trades in the markets with the sharpest drawdowns. The risk overlay did not make any major interventions in the system.

Their best years have been much bigger numbers than the 2018 and 2019 setbacks, and thus the return profile is positively skewed. This is due to the inherent positive skew of momentum strategies as well as stop losses.

Structural alpha lull

In the first half of 2024 the overall strategy performed well but the structural alpha sleeve has seen a setback. There have been a lot of small losses across diverse markets, including metals and meats, which have outweighed positive contributors, such as rubber and Bitcoin futures. The structural alpha markets include some synthetic markets, where calendar spreads were strong contributors between 2021 and 2023 but have also detracted in early 2024. "This is normal enough trend behavior. There is no specific shock, and it happens all the time," says Neubauer.

It is partly just a giveback of last year's profits. Structural alpha markets, which are mainly commodities, contributed more than 6.5% in 2023, including sugar, Phelix electricity and feeder cattle, which greatly outweighed some losses on the SARON Swiss Franc interest rate.

Trend model diversification

The core style factor exposure has always been trend following. However, there is some nuanced diversification within the trend models that smooths out returns and increases the chances of catching some longer-term, medium-term and shorter-term trends.

SMN uses a range of lookbacks between four months and two years to detect trends, and the different timeframes also use different signals. One of them is more based on breakouts and the other more on classic momentum trend identification. "Using different lookback periods and timeframes adds some degree of diversification, especially for entry and exit points. The correlation between the trend signals is significant, and they are very unlikely to be long or short in the same market. The models and signals start to kick in one after the other, building the position side," says Waldstein.

Each trend model is a package combining signal logic, lookback parameters and stop loss limits. The optimal combination of the six trend identification signals has already been determined, and the parameters could be reviewed every five years or so. "But we think that designing a system to vary allocations between the six trend models would be overfitting," says Waldstein. The models have been tried and tested over nearly 30 years now, and the only change was discontinuing some shorter-term models that were used in the early years. SMN build their own models and do their own coding rather than relying on third party software vendors.

Data periodicity varies with the use case. "Closing end of day prices are good enough for identifying trends, but intraday tick prices can be used for historical volatilities. Though there are minimum liquidity criteria, volumes are not part of the model," says Mayer.

Redundant and productive research

The most productive research at SMN has been adding new markets, which have improved returns and diversification. The research process does not often arrive at the magical Eureka moments of discoveries that we see in Hollywood movies. It is more often about a methodical process of eliminating blind alleys and unfruitful avenues. Commodity carry strategies are one example of a research project that did not lead to any changes. "It is hard to get good Sharpe ratios from a robust and non-optimized model out of sample only based on carry. Combinations of momentum and carry can work on some commodities and expiries but not others. Results look good before costs, but not after considering transaction costs and slippage," says Waldstein

"Overall, we have made no major changes but have had lots of minor improvements. The path forward is not one single research decision but rather the sum of many incremental changes. Our philosophy is to be robust and not to overfit," reflects Waldstein.

SMN's strongest performance years have generally included some form of crisis but this is not essential for positive performance. The strategy has been annualizing close to its long run average in 2023 and the first half of 2024, with interest on cash balances adding to trading performance.

Summer volatility

Since CTAs (commodity trading advisors) are lowly correlated with traditional financial markets, their inclusion naturally enhances the risk/return profile of any diversified asset portfolio. This characteristic is particularly valuable during slower and more prolonged downturns in financial markets. However, it's important not to misinterpret this as a mechanical hedge, as trend following CTAs may not provide protection against sudden and rapid market downturns. This was evident again this summer in early August when a sharp and deep decline in equity markets disrupted the prevailing trend. "While this inevitably resulted in losses for the SMN Diversified Futures strategy as well, it is crucial to highlight that during this market phase, the performance contribution from commodities was stable and did not increase the negative returns. This underscores the benefits of a broad and diversified investment universe and specifically the focus on the commodity exposure," sums up Mayer. THFJ

"We place a heavy weight on trend identification and sometimes have no position in a market. This is more of a philosophical position."

- CHRISTIAN MAYER