CTAs: Feeling the Heat

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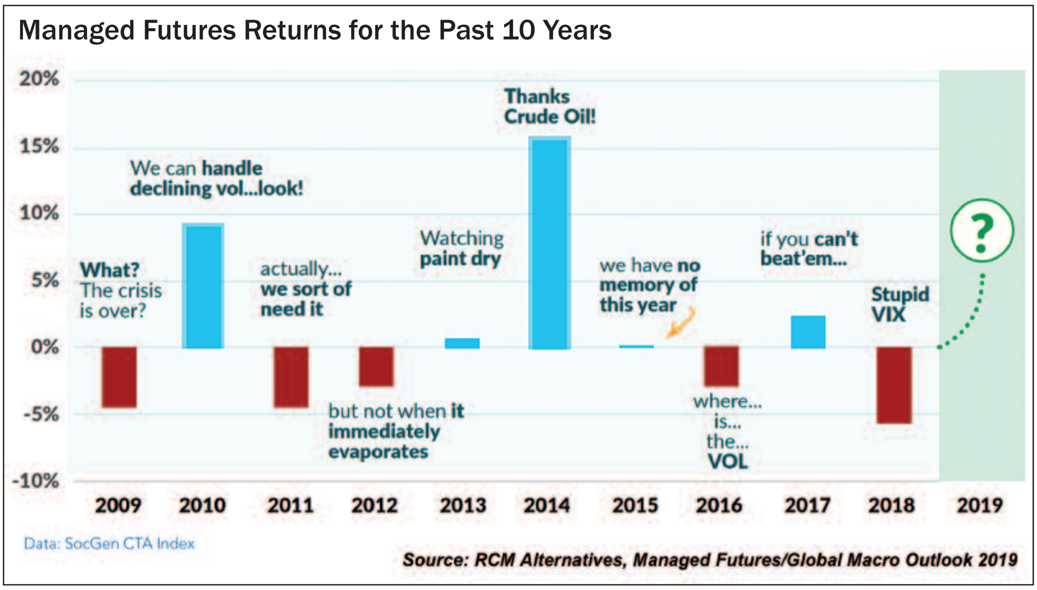
2018 saw CTAs cap a generally poor decade of performance with a particularly bad year of losses. Given this, Galen Stops takes a look at whether the rationale for investors including CTA strategies in their portfolio is still valid.

Post financial crisis, CTAs have struggled to produce returns, with only 2010 and 2014 standing out in the past decade as years of significant positive performance. Part of the reason for this is that many of these funds have simply failed to respond adequately to fundamental shifts in the financial markets.

"These funds had something that fit to the data set that they were working with and it worked well for a number of years for them. But the data set changed a little bit in the last decade, they didn't adapt and they've lost a lot of money," is the assessment from the CEO of one CTA that's been trading for over 30 years.

They add: "Another reason why you've seen poor CTA performance is that, prior to this decade, a big portion of CTA profits were made in interest rate futures, where you had some nice sized multi-year moves back then. But you haven't had that since QE, especially in some of the foreign interest rate markets where they were making good money, they've been getting whipsawed in those markets. These interest rate contracts have failed them in this last decade."

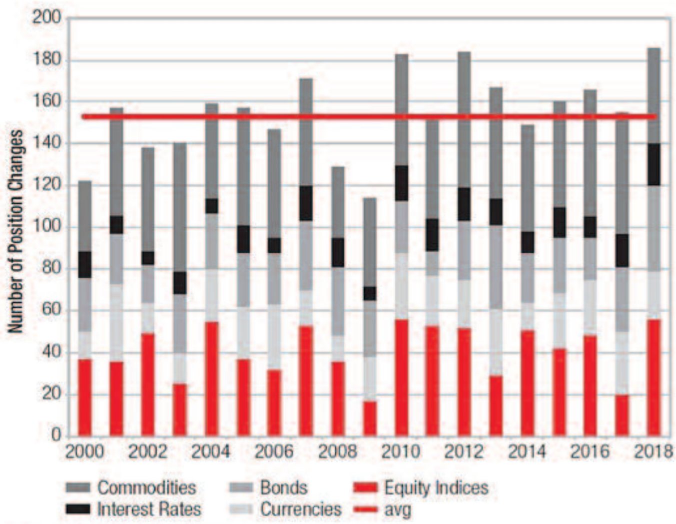
2014 is now the last year that CTAs really produced the goods but, even in amongst a decade of relatively poor performance, 2018 stood out as a particularly bad year for these funds, with the Societe Generale (SG) CTA Index finishing it down 5.84%. But what's interesting about this is that, on the surface of things, 2018 should have been a good year for these funds.



For a number of years CTAs have been explaining away their poor performance by highlighting the lack of volatility in markets, aligned central bank policies removing interest rate differentials and the seemingly never-ending bull run in the equities market.

But 2018 saw central bank policies diverging in a meaningful way, increased volatility and some sizable stock market corrections – so why hasn't CTA performance been better? Further, CTAs are typically looked upon as a diversifier investors' portfolios, and in particular as a hedge against against equity market downturns. So why were the two worst months of CTA performance last year in February and October, when two of these aforementioned corrections occurred?

Number of position changes for trend indicator by year



Source: SG CIB, Bloomberg

The answer to the first question, explains Chad Martinson, co-CIO and managing director of Efficient Capital Management, is that markets lacked sustained directional movement in 2018. This led to challenging performance for many in the CTA space with the SG Trend index logging its worst annual result in nearly 20 years.

"That's not what CTAs are built for, they're built to generate profits when directionality is sustained," says Martinson.

This also helps explain why CTAs largely failed to protect investors as equity markets suddenly plummeted, only to then start immediately rising again.

"There are a lot of hedge funds out there, but very few hedge funds actually act as hedges. CTAs are one of the few that do, as was demonstrated during the global financial crisis, when the dotcom bubble burst and, more recently, in 2014 with strong move in currencies and a collapse in oil prices driving profitability. But it takes time and sustained directionality for CTAs to really offer that portfolio diversification," says Martinson.

The Nuances of Correlation

On this point of CTAs as hedges in the portfolio, there's two key issues to consider. One is whether some CTAs have been chasing performance by increasing their exposure to equities. If these funds are looking at their models and seeing that out of hundreds of signals to put on short trades in equities they only made money on a few occasions, they have to decide whether or not they should skew the model to prefer long trades in equities.

"The pure systematic funds would say, 'No way, you have to be pure to your model, it shouldn't have a long or short bias in different markets'. But a lot of these people have been taken out on stretchers, so to speak, because CTAs need to make money for their investors. So if the choice is to adhere to a strict, pure model and go out of business or adapt with the times, what choice is there?" says Jeff Malec, managing director and partner at RCM Alternatives.

There is indeed some data to suggest that CTAs were increasing their exposure to equities from mid-2017 into the first part of 2018. Data provided to Profit & Loss by Ian Rayner, founder of the hedge fund specialist firm Rayner Gobran, shows that correlation/beta were negative through mid-2017 as CTAs missed the surge in the S&P 500, but that from mid-2017 through first quarter 2018 CTAs got steadily longer the S&P 500. They peaked at an 18-month beta of ~0.74, meaning they were exposed to 0.74% for every 1% of S&P 500 movement over the prior 18 months, which seems like a lot for a diversified strategy with exposure to rates, FX, and commodities.

Ian Rayner

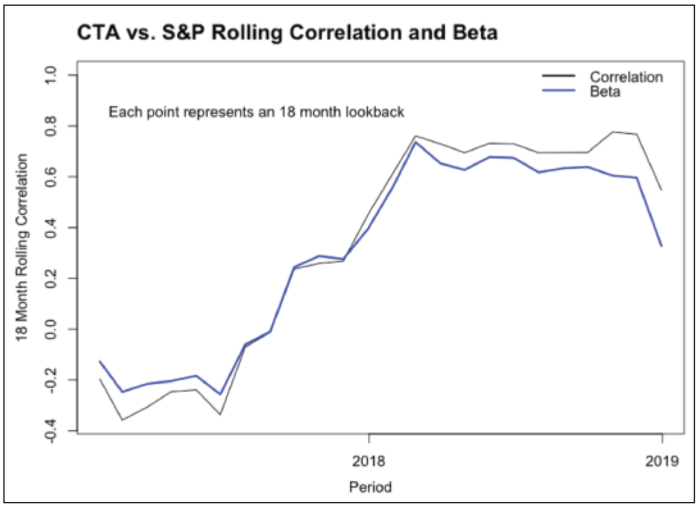
Thus, when the S&P 500 whipsawed around during a volatile February, CTAs experienced their worst month of 2018, with the SG CTA Index down 6.34%.

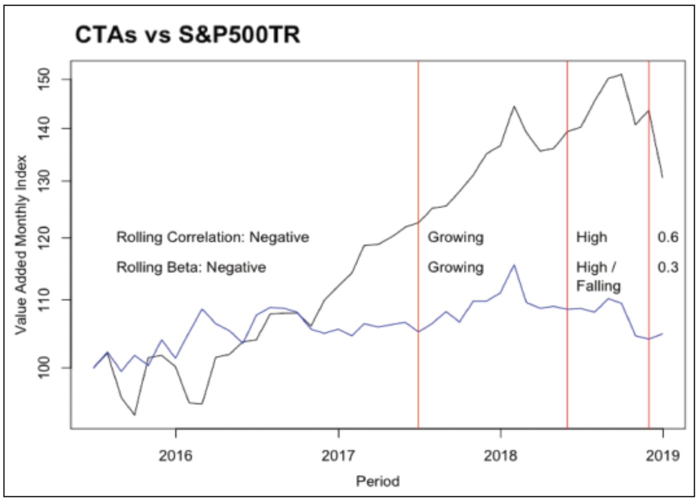
Herein lies the danger of CTAs adding a long equities bias to their strategies. If CTAs are increasingly making money from being long equities then they're no longer diversifying the existing long bias in many investors' portfolios. Instead of providing a hedge, they're arguably increasing the risk and some would say that they're guilty of style-drift.

Malec argues, however, that this is a very nuanced piece of style drift and that, if the math is done correctly, it can still be beneficial.

"I don't think that overall this would equate to a necessarily higher correlation to stocks, most CTAs are still trading a variety of different sectors, such as energies, fixed income and currencies. This is a nuanced beta inside that one equities component. Let's just say, for example, that a slight long bias increased the correlation to equities by 0.1 but increases the Sharpe Ratio by 0.4, well then that's a worthwhile exercise," he says.

Incidentally, during the second half of 2018, while correlation remained high, the data from Rayner shows that 18-month beta dropped somewhat into November, hitting 0.60, before then plummeting to 0.33 by December. So while CTAs were still long, they were gradually reducing their leverage throughout 2018.





The other issue with CTAs as a hedge in portfolios is that investors have tended in the past to confuse non-correlation with negative correlation. One of the traditional selling points for CTAs is that their strategies are meant to be uncorrelated to equities, meaning that sometimes they will trade in the same direction as these markets, sometimes they will trade in the opposite direction to these markets, but on average there is no causal relationship between the two.

This is obviously not the same as being negatively correlated to the equity markets, and yet because CTAs have historically tended to perform well during equity reversals, investors have often conflated the two, explains Tom Wrobel, director of alternative investments consulting at Societe Generale Prime Services.

"Really it depends how the equity reversal plays out," he explains. "In 2008 it was actually a very slow drawdown that allowed trend following CTAs to detect a trend and then position themselves to take advantage of it. Whereas what we saw last year was really three sudden down moves or corrections where the market subsequently recovered."

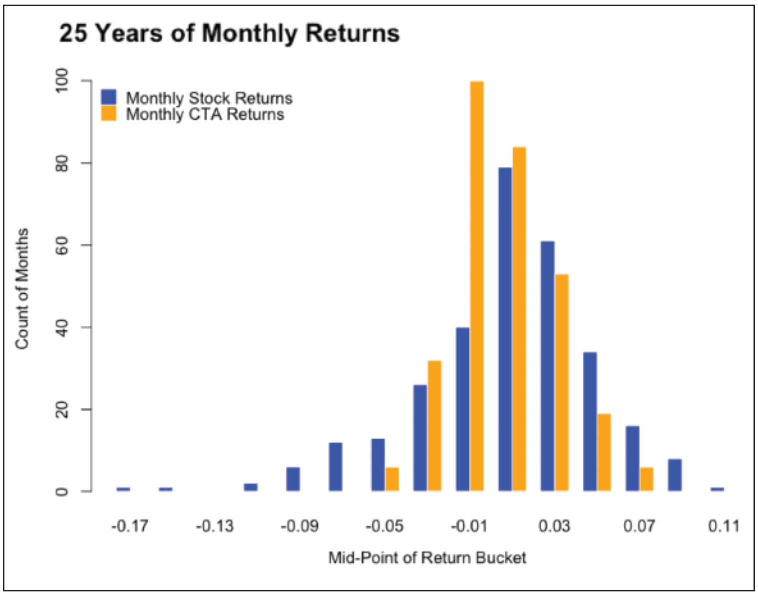
While this is all true, in order to be fair to investors it's worth highlighting that numerous sources suggest to Profit & Loss that this confusion might be – at least in part – a consequence of marketing spin from the CTAs themselves.


Jeff Malec

Keeping the Spare Tyre Handy

All of this begs the question, however, should investors be considering replacing the CTA strategies in their portfolios with ones that are actually negatively correlated to equities if this is what they're really looking for?

According to Malec, while most sophisticated investors realise that CTAs will on average provide diversification benefits over a long period of time, the fact that there are a number of qualifiers regarding exactly in what conditions they will provide those benefits, some investors are looking at alternatives.



"We're seeing more people being willing to pay some costs for negative correlation to the equity markets, the classic example is buying puts so that they know when the market goes down they're going to make money. The new flavour seems to be wanting a put buying profile, and the managers are trying to figure out a way to lower the expense for giving them this profile as much as possible," he says.

Malec adds: "In this regards there seems to be a new batch of managers that have been doing some fairly unique things. They might be selling the front-end of the VIX curve to pay for the longer dated options on the VIX for when it spikes, or they might just be doing day trading, they're just short the S&P 500 each day in case it breaks out. So there are some interesting ways that they're trying to get that downside exposure without the qualifiers of a traditional managed futures strategy and without the fixed costs of a put buying strategy."

However, while Malec sees a trend for more investors demanding negative correlation instead of the non-correlation offered by CTAs, he adds that in the long-term they might be disappointed.

"Statistically, these strategies will be negatively correlated, but in mathematical terms they will have a great downside capture. So over the long term they will probably have the exact same noncorrelation, it's just that they would do a better job of capturing the downside months in the S&P 500," he says.

Martinson, meanwhile, argues that there is no need to replace CTAs in the portfolio because they are behaving exactly as they are supposed to, it's just that the market conditions have been unfavourable to these strategies.

"There were some challenges in 2018 but if we had seen the equity correction persist into 2019 then CTAs would have been on the right side of that move – they were in very defensive positions: short equities, long bonds, long precious metals and that would have produced strong profits. CTAs did exactly what they were supposed to do, it's just that the markets didn't cooperate from their perspective. The equity markets recovered and while that's good for investors, it's not necessarily good for how CTAs were positioned," he says.

Indeed, this view is echoed by an allocator at one fund with over $30 billion in assets under management (AUM) and advisement, who says that their fund has kept its allocation to CTAs fairly static in recent years despite poor returns because they've found it so hard to time when these strategies will make money. They add that the natures of CTAs are such that, even though they haven't produced good returns since 2014, it doesn't mean that they won't this year.

"Just because you haven't had a flat tyre in the last 10 years doesn't mean you're going to throw out the spare tyre from your trunk. The fact that it's vol friendly means it will serve its purpose when the time comes, it's just hard to time it," they say.

Another argument in favour of maintaining CTAs in the portfolio is skew.

"Skew is an aspect of distribution of returns that not so many people pay attention to," says Rayner. "The easiest way to describe skew is to say: what type of surprises am I going to get if I invest in this asset? Am I going to get nasty surprises or pleasant surprises?"

Charting monthly returns of the S&P 500 versus CTA returns, Rayner shows that a really good month in the stock markets might produce 11% returns, but that a very bad month could see losses of up to 17%. And in general, the outliers for the S&P 500 tend to be skewed towards negative results rather than positive.

By contrast, the highest return from CTAs was 7% but the lowest was -5% with the results being mar-

Chad Martinson

ginally skewed to the positive side.

"CTAs tend to be positively skewed in terms of returns because, like all good hedge funds, they tend to have strong risk controls, they're very concerned about their level of exposure and they're constantly managing their volatility, letting the winning positions run and cutting the losing ones," says Rayner.

This skew is also evident in a scattergraph of CTA monthly returns over the past four years versus the S&P 500. In the top left hand quadrant, when the S&P 500 lost money but CTAs made money, the losses in the stock market go way out to the left. The bottom right quadrant is when the S&P 500 is positive and CTAs lost money, and even when this is the case most of the losses are still tucked in close to the zero line.

However, the bottom left quadrant is when both CTA and S&P 500 performance is negative, and although they could be considered outliers, the two months from 2018 out to the bottom left arguably weaken the skew argument.

"Those two big red dots are February and October last year. They represent pretty poor performance, and I think that's why CTAs are getting slammed a little, it's for those two return points, but they are pretty extreme," says Rayner.

Moving Away from Trend Following

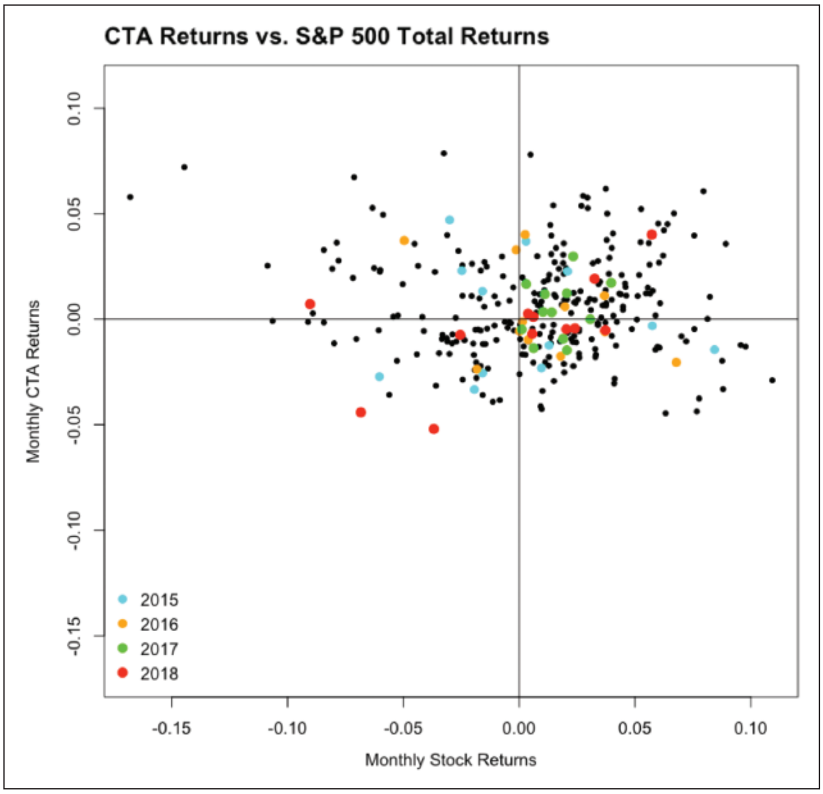
When analysing CTA performance one final point to consider is the role of trend following versus non-trend following CTAs in the portfolio. For example, one allocator at an asset manager with over $100 billion in AUM says that, while they recognise that there might be nothing wrong with a programme even if it doesn't make money for five consecutive years, it's a problem for their clients if it goes five years without making money. As a result, they say that they are increasingly shifting their allocations towards funds that offer other strategies beyond just systematic trend following, with the expectation that these other strategies will help generate more consistent returns.

Another US-based allocator says: "I rate trend following as a strategy, but they've been doing so badly that I don't want to be correlated to them. Everyone is aware of how these strategies work now and so they follow them. I want to be out in front of the trend strategies."

And this shift is apparently being clearly recognised by the CTAs themselves.

"Trend following is still where the vast majority of assets are deployed. However, the newer managers coming into this space that are attracting investment are non-correlated to both trend and the equity markets. Quant macro is an example of this, it's a big strategy group that performed quite well in 2018 while at the same time having very little correlation to equity markets," says Martinson.

Wrobel also highlights this strategy type as a standout last year, commenting: "Quant macro strategies performed relatively consistently last year and that's because they take quite different positions to trend following, they're more of a fundamentally valued



model so going into the events of January and February they were seeing markets as relatively overpriced. These strategies are applying non-trend models other than just simple momentum to markets and because this diversification amongst models we saw a range of returns from about 5-10% from these strategies."

He adds: "Adding non-trend elements to the portfolio is something that we're seeing more of because pure trend following has become a very commoditised space, which means that fees have been reduced for these strategies. Diversifying away from trend might involve trading more esoteric markets that are harder to access, it might mean adding more fundamental strategies, or it could mean applying techniques like machine learning to either optimise their existing strategies or create new ones. The funds that are doing this are making it part of their marketing pitch, arguing that it shows they're committed to research and developing new models and sources of alpha."

Ultimately, this change is symptomatic of the challenge facing CTAs right now: they don't believe that their existing models no longer work and many of them can hold up mathematical and historical data to back up their claims. Yet the cold, hard facts are that these models have struggled to produce the returns that investors demand in recent years. So until (or unless) CTAs have another year like 2008 or 2014, expect to see non-trend strategies become an ever-larger focus for these hedge funds.