



# CTAs as a Fixed Income Hedge

- Yoav Git, Head of Fixed Income, Man AHL

- Graham Robertson, Client Portfolio Manager, Man AHL



As trend followers, for the most part, the CTA industry promotes itself as having 'insurance-like' properties. Specifically, this refers to performance during crisis periods like the bursting of the dot-com bubble in the early noughties, or the credit crisis around 2008. During these periods, equities<sup>1</sup> were down 46% and 49% respectively while the Newedge CTA Index was up 33% and 14% respectively. What is implicit in this typical analysis is that 'crisis' is often defined in equity terms. During the same two periods, bonds<sup>2</sup> returned 25% and 13% respectively: there was no crisis in fixed income.

This begs the question, how do CTAs perform during a fixed income crisis? This is not a question originating just from intellectual curiosity. The Purple Book, which provides information on the UK pensions landscape, says that schemes now have larger exposure to fixed income than equity assets<sup>3</sup>. So the performance of CTAs during fixed income sell-offs should be a concern to these managers. Further, with many eurozone government bonds now trading with sub-zero yields, the question has become quite a timely one.

The reason the answer is not widely known stems from the fact that there has not been a sell-off in fixed income of anything like the magnitudes seen in equity markets over the period that many CTA managers such as ourselves have track records, namely around two decades. Fig. 1 shows this clearly through the strong clustering of fixed income returns to the right of the y axis, and few, if any, to the far left.

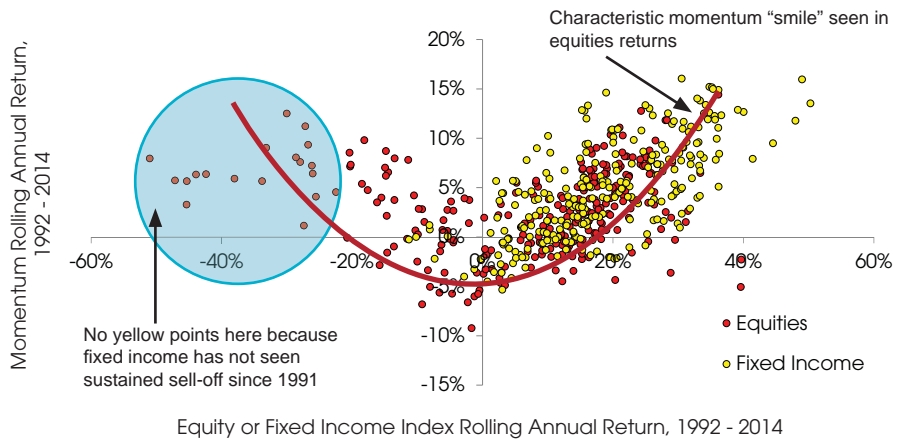
To see a strong fixed-income sell-off we revisit the US market in the 60s and 70s.

We can simulate the performance of a CTA by running a simple momentum algorithm over a synthetic futures contract constructed using US Treasury yield curve data from the Federal Reserve.

As we extend further back into the past, the range of rolling one-year periods exhibit a wider range of performance, in our case -20% to +30%. We plot our results by percentiles of these periods in Fig. 2.

The results are intuitive. As expected, returns of a long-only strategy increase monotonically as percentile return increases.

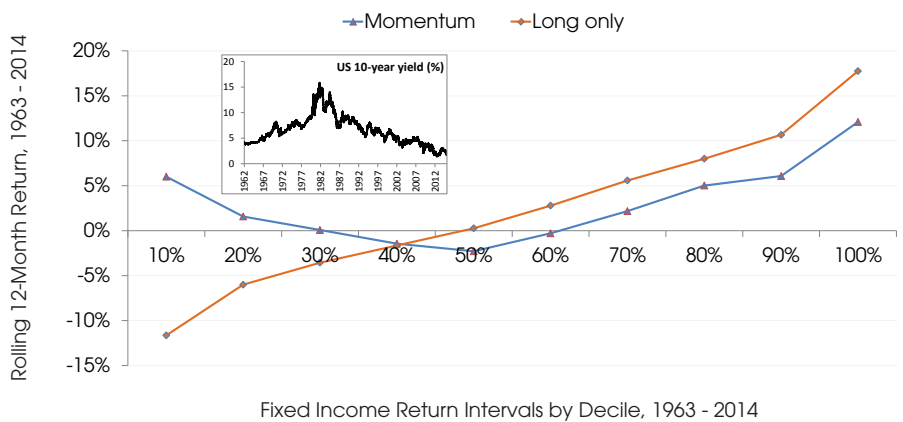
Fig. 1: Rolling Annual Returns, Sampled Monthly, 1992-2014\*



Source: Man Group

\*A range typical of the longest CTA manager track records. Equity index represented by MSCI World Net Total Return Index hedged to USD, Fixed Income by Citigroup World Government Bond Index hedged to USD, scaled by three. Momentum returns are from simulations.

Fig. 2: Average Annual Returns, Sampled Monthly, 1963-2014\*\*



Source: Man Group

\*\*The momentum strategy looks at returns of a synthesized 10-year US Treasury future over the previous year. If this number is positive, the momentum strategy goes long. If negative, it goes short.

The momentum strategy, on the other hand, shows the characteristic CTA 'smile' that is evident in Fig. 1. By choosing an extended timescale containing a range of fixed income environments, the characteristics of a fixed income momentum strategy are seen to be similar to those of an equity momentum strategy. This should come as no surprise; there is no long bias in the construction of a fixed income momentum signal. A momentum strategy on any asset class can be profitable when price moves are strong and sustained in either direction, but it struggles when moves are mid-range.

In summary, the track records of many CTA managers are not long enough to have seen sustained fixed income sell-offs, but there is good reason to believe that CTAs can profit in this environment.

## Man Group

Man is a leading investment management business with a diverse offering in hedge funds and long only products. At 31 December 2014, Man managed \$ 72.9bn.

[www.man.com](http://www.man.com)

<sup>1</sup>MSCI World Net Total Return Index hedged to USD

<sup>2</sup>Citigroup World Government Bond Index hedged to USD (Total return)

<sup>3</sup>[http://www.pensionprotectionfund.org.uk/Documents/Library/Documents/purple\\_book\\_2014.pdf](http://www.pensionprotectionfund.org.uk/Documents/Library/Documents/purple_book_2014.pdf)