

Currency – more than just a risk provider?



Mesirow Financial senior vice president, currency specialist, Amy Middleton, discusses why currency is an ideal way to diversify risk within traditional portfolios

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The foreign exchange (FX) market is the largest and most liquid in the world with approximately \$5.1 trillion traded each day. What is unusual about FX markets is the high proportion of participants, such as central banks and corporates, who trade due to necessity as opposed to a motivation to make money. This creates market inefficiencies, which in turn creates the potential for returns through trading currencies. Also, the returns generated from currency strategies tend to exhibit low correlation to those of equities and bonds and therefore make an allocation to currency an ideal way to diversify risk within traditional portfolios.

How can investors access currency returns?

Currency beta factors

A currency beta factor aims to generate returns by applying simple and easy to understand trading strategies to a basket of currencies. The trading rules are systematic in nature and are usually adjusted monthly.

Mesirow offers institutional investors three individual currency factors each designed to reflect a unique 'risk premium':

1. *Carry*: The 'forward rate bias' suggests that currencies with higher interest rates will appreciate versus currencies with lower interest rates;

2. *Value*: Whilst currencies may have long term 'fair values', over shorter time horizons prices may deviate significantly prior to mean

reversion; and

3. *Momentum*: The 'random walk' theory does not appear to hold in the currency markets and past prices can often be used to predict future prices.

For investors who would prefer a more diversified approach in terms of trading style, Mesirow also offers a multi-strategy factor to institutional investors where returns are equally weighted across the three individual style factors.

A drawback to the simplicity offered by beta factors is that performance can sometimes suffer if the risk environment changes for example. The Mesirow Financial intelligent currency factors aims to mitigate this by having a methodology that adjusts positioning in line with strength of signal and deleverages certain positions in times of crisis via a systematic risk indicator. This allows the factors to retain transparency while being able to adapt to changing market environments versus completely naïve factors.

Currency alpha programmes

Currency alpha aims to provide an improved risk-adjusted return in comparison with a currency beta factor. This is achieved by applying more specialised and complicated trading strategies designed by quant research teams. Trading is usually higher frequency, typically daily, and currency alpha programmes will also tend to encompass a wider range of currencies than a beta factor. Currency alpha tends to exhibit a higher

volatility than currency beta factors and may also experience larger drawdowns, but volatility targets can usually be tailored in line with risk tolerance. The additional risk should be compensated by additional return.

The Mesirow Extended Markets Currency Alpha Programme (Mesirow Extended Alpha) combines a systematic component, which accounts for most of the programme's risk, and a discretionary component. The systematic component consists of a technical strategy and an independent fundamental strategy. The technical strategy includes trend following, mean reverting and uncorrelated models based on data other than currency prices, such as equity market behaviour.

There are two models included in the fundamental strategy – a Relative Value Model, based on economic data, and a Forward Rate Bias Model, which is an interest rate carry-trade type model. Both models are ranking models forming USD neutral portfolios that are long the top five best currencies and short the five worst currencies. Empirical evidence suggests that the fundamental strategy works best in low or falling volatility regimes, while the technical strategy tends to generate stronger performance when volatility is high or rising. To optimise expected returns from the systematic component capital is dynamically allocated between the fundamental and technical strategies based on a proprietary

forward-looking measure of the volatility regime, the Global Volatility Indicator. The underlying currency universe used is broad, to maximise the opportunity for alpha generation, and include both G10 and emerging markets.

Performance: How does currency compare with equities and bonds?

Figure 1 shows the performance of a hypothetical equity portfolio (equity portfolio) and hypothetical bond portfolio (bond portfolio) for a European-based investor over the period of 31 Mar 2004 to 31 Dec 2018 together with the performance of Mesirow's Multi-Strategy Factor and Mesirow Extended Alpha.

Over the period in question, both the Mesirow Multi-Strategy Factor and Mesirow Extended Alpha exhibited superior risk-to-return statistics compared to the equity and bond portfolios. In addition, we see that the correlation between the returns generated by currency and equities and bonds is low, suggesting an allocation to either currency strategy may result in diversification benefits.

Adding currency to a traditional asset allocation

Using the data from Figure 1, in we have applied an asset allocation of 60 per cent to the equity and 40 per cent to the bond portfolios to calculate the returns for a 'traditional' portfolio from a Eurbase (Traditional Portfolio).

To assess the impact of adding currency, we also created an alternative portfolio where the allocation to the equity and bond portfolios was reduced to 50 per cent and 30 per cent, respectively, and then re-assigned 20 per cent to the Mesirow

Figure 1. Performance Statistics of Equity and Bond Portfolios versus Mesirow Multi-Strategy Factor and Mesirow Extended Alpha: 31 March 2004 – 31 December 2018.

	Equity Portfolio (MSCI-ex EUR, Unhedged)	Bond Portfolio (Barclays Global Agg-ex EUR, Unhedged)	Mesirow Multi- Strategy Factor	Mesirow Extended Alpha
Annualised Return	6.75%	3.34%	2.52%	6.54%
Annualised Standard Deviation	12.15%	9.37%	3.82%	8.03%
Return/Risk	0.56	0.36	0.66	0.81
Maximum Drawdown	-47.12%	-18.35%	-4.98%	-24.10%
Correlation (Equity Portfolio, Currency)			0.13	0.02
Correlation (Bond Portfolio, Currency)			0.12	0.03

Multi-Strategy Factor (Alternative Factor Portfolio) and Mesirow Extended Alpha (Alternative Alpha Portfolio) individually.

The results show that by adding an allocation to currency, either through Mesirow Multi-Strategy Factor and Mesirow Extended Alpha, not only was portfolio risk reduced to approximately 7 per cent from 8.4 per cent versus a traditional equity/bond split but it also reduced the maximum drawdown by approximately 13 per cent.

Currency as a source of alpha in an overlay framework

Investing in foreign equities or bonds creates currency risk to the portfolio. Left unhedged, this currency exposure can contribute significant, often uncompensated, risk.

We calculated the amount of risk currency contributed in the traditional 60/40 portfolio seen previously. Left unhedged, the currency exposure was responsible for almost 82 per cent of the total risk of the portfolio. That is significant given that the currency exposure was 'unintentional' and not the primary objective of the portfolio.

It is possible to use that risk budget more efficiently by fully hedging out the existing currency exposure of the portfolio and re-allocating some of

the risk saving to Mesirow Multi-Strategy Factor and Mesirow Extended Alpha. Hedging out the 'unintentional' currency exposure and allocating 20 per cent to either the Mesirow Multi-Strategy Factor or Mesirow Extended Alpha Programme has the effect of improving the return-to-risk compared to both the unhedged and hedged portfolios as seen from the improvement in the return/risk ratio to 0.7 (Multi-Strategy Factor) and 0.8 (Extended Alpha) from 0.6.

Summary

The FX markets offer ample opportunities to generate returns. Investors can access these returns through a variety of mediums, including currency beta or alpha strategies. Given the low correlation and comparable performance, adding currency to a traditional portfolio of equities and bonds may lead to improved performance due to its diversification effect. In addition, in an overlay framework, it is possible to utilise a risk budget more effectively by hedging out unintentional currency risk created by exposure to the underlying assets and allocating this risk saving to currency within a portable alpha context. ■

In association with



¹ Bank of International Settlements Triennial report 2016

² The Equity Portfolio consists of the equities and weightings of the MSCI World -ex Europe Index.

³ The Bond Portfolio consists of the bonds and weightings of the Bloomberg Barclays Global Aggregate Bond Index - ex EUR.

⁴ The Mesirow Multi-Strategy Factor performance is based on backfilled data.