Hidden beta in risk premia strategies

Most risk premia strategies sold off significantly earlier in 2018 while equity markets lost up to 10%. For investors, it is crucial to understand which risks are taken to pick a suitable strategy.

Risk premia strategies have become increasingly popular in recent years, especially due to their promise of uncorrelated returns. To many funds, February 2018 was a first stress test, as most strategies were launched in 2016 or afterwards, a period of mostly subdued market volatility. Most funds suffered considerably earlier this year. Some investors may indeed have wondered why their strategies displayed high beta exposure, despite most of them not having any explicit long equity exposure. Sources of beta are manifold, and can easily add up to significant aggregate exposure.

Many risk premia strategies comprise equity long/short portfolios which seek exposure to the value, size and momentum premia. The value premium, for instance, when implemented in dollar-neutral long/short form, can leave significant residual beta. This is because value stocks often have a beta greater than 1.0, given their additional cyclical risk. By contrast, short positions in growth stocks often have a beta below 1.0. Therefore, the dollar-neutral implementation may generate implicit beta.

Yet another way beta can creep into portfolios is in the form of volatility selling. While these positions expose investors to the risk of negative returns during market crashes, they tend to be very attractively rewarded in the long run. One of the most prominent volatility strategies is selling variance swaps. Though variance swaps are delta hedged, they are by definition exposed to equity risk, especially during market downturns. This is because equity sell-offs coincide with an increase in realised volatility, which in turn leads to negative swap returns.

Time-series momentum, also known as buying winners and selling losers, builds up equity exposure temporarily. Typically, the strategy is implemented with derivatives based on holding long positions in assets with positive past returns, combined with short positions in assets with negative past returns. Applied to equity markets, a positive economic regime tends to mean long positions in the majority of equity indices and vice versa for a negative economic regime.

A final example of equity beta exposure is assets which are linked to the performance of equity markets. The most prominent strategy in this field is investing in credit spreads. But other premia – such as FX carry – have a link to equities too. The reason for this is that countries with high interest rates are more sensitive to the global economy than countries with low interest rates. Hence, investing in FX carry links the portfolio to the equity markets which are by nature sensitive to the global economy.

In summary, there are many ways for beta exposure to enter a risk premia portfolio, as many of the premia share common sources of risk. Combining several beta-exposed premia in a strategy can easily result in a heavily exposed portfolio. The sharp sell-off in equity markets in February highlighted the importance of understanding how premia are implemented. The choice of strategy should always be made in a context of the investor’s existing asset allocation. «