

IS VOLATILITY A USEFUL SIGNAL FOR DYNAMIC CURRENCY HEDGING?

Jeremy Schwartz — Global Head of Research
02/23/2016

WisdomTree and Record Currency Management Ltd.¹ partnered to create a family of dynamic currency-hedged Indexes that utilize three factors to determine the [dynamic hedge ratio](#) on each individual currency: [interest rate differentials](#), [momentum](#) and [value](#). In the field of currency hedging one oft-debated question is whether there are other effective signals and, in particular, whether [volatility](#) could also be a useful signal. We have, of course, carefully considered which signals we believe to be most optimal, and although we recognize that volatility in currency markets can show patterns of behavior, we are convinced that it is not an appropriate independent signal to use in a [hedging](#) strategy, for the simple reason that volatility is by definition non-directional. **Volatility Does Not Dictate Direction** What do we mean by non-directional? Simply that rising (or falling) volatility tells us something about the **size** of observed movements in a currency pair, but nothing about the **direction** of those movements. Knowing that the [standard deviation](#) of exchange rate movements has become wider or narrower could be consistent with either one currency strengthening or the other—or, indeed, neither. In a [dynamic currency-hedging](#) strategy, which is naturally long equities, the only trade available is to be currency hedged (e.g., [long](#) U.S. dollar and [short](#) euro, or yen, or another currency)—or not. Since the purpose of dynamic hedging is to seek greater exposure to hedges that are expected to be profitable, and less exposure to hedges that are expected to be loss-making, it is essential for each signal to have some explanatory power as to which currency in any pair is expected to appreciate, i.e., to be directional. An example may serve to illustrate the point. We have tried to create a signal hedging strategy that is as widely applicable within developed market currencies as possible, without having been “[curve-fitted](#)” to one particular domestic currency or set of foreign currencies. Volatility seems to defy this. If, for example, one investor was looking for a strategy that worked well for hedging euro exposure into dollars, and another wanted to hedge dollar exposure into euros, then rising volatility in the euro/dollar exchange rate might tell both of them to hedge more. Since the exchange rate will only go one way, only one of these hedges will be profitable, while the other will be loss-making—so the signal will have worked for only one of the investors. **Interest Rates, Value and Momentum Are Directional Hedging Signals** By contrast, higher U.S. interest rates, or the momentum of the U.S. dollar, or an undervalued dollar, will all signal to U.S. investors to hedge their euro exposure, while also being a signal to euro-based investors to not *hedge* their U.S. dollars. These three signals are thus consistent by virtue of being directional. **Looking for Volatility Reduction? Adopt Full Passive Hedging** Finally, there’s the question of whether an investor wouldn’t always want to hedge more in a more volatile environment, simply because currency movements are at risk of being bigger. To this we would respond that bigger movements can come in both positive and negative directions, so once again the directionality of the signal is vital. If an investor is concerned about currency volatility, a full currency-hedged strategy may be most appropriate, as the long-term results showing currency exposure in a broad international framework has historically increased the volatility of international investments.² This is why WisdomTree has long suggested that fully currency-hedged strategies could serve better as core, strategic long-run allocations. **Dynamic Hedging Can Help Returns** The goal of the dynamic hedged Indexes WisdomTree and Record created were to tactically add value and return potential above fully hedged and fully unhedged offerings by incorporating the dynamic signals. Our signals were designed to be directional, so while they do lower volatility compared to *unhedged* benchmarks, they are likely to see a small volatility pickup over a fully hedged strategy. But our research leads us to believe that higher returns could compensate investors for this small pickup in volatility. ¹No WisdomTree Fund is sponsored, endorsed, sold or promoted by Record Currency Management (“Record”). Record has licensed certain rights to WisdomTree Investments, Inc., as the index provider to the applicable WisdomTree Funds, and Record is providing no investment advice to any WisdomTree Fund or its advisors. Record makes no representation or warranty, expressed or implied, to the owners of any WisdomTree Funds regarding any associated risks or the advisability of investing in any WisdomTree Fund. ²Sources: WisdomTree, Bloomberg, as of 12/31/2015.

Important Risks Related to this Article

Hedging can help returns when a foreign currency depreciates against the U.S. dollar, but it can hurt when the foreign currency appreciates against the U.S. dollar.

For more investing insights, check out our [Economic & Market Outlook](#)

Dynamic Hedge Ratio : refers to the percent of currency risk that a strategy is seeking to mitigate at a particular point in time.

Interest Rate Differentials : The Difference between the 2 Year interest rate swaps of the United Kingdom vs. the United States.

Momentum : Characterized by assets with recent price increase trends over time. This term is also associated with the Momentum Factor which associates these stock characteristics with excess return vs the market over time.

Value : Characterized by lower price levels relative to fundamentals, such as earnings or dividends. Prices are lower because investors are less certain of the performance of these fundamentals in the future. This term is also related to the Value Factor, which associates these stock characteristics with excess returns vs the market over time.

Volatility : A measure of the dispersion of actual returns around a particular average level. .

Hedge : Making an investment to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.

Standard deviation : measure of how widely an investment or investment strategy's returns move relative to its average returns for an observed period. A higher value implies more "risk", in that there is more of a chance the actual return observed is farther away from the average return.

Dynamic Hedge : Strategy in which a currency hedge can be varied (as opposed to targeting a constant level) and change over the course of time.

Long (or Long Position) : The buying of a security such as a stock, commodity or currency, with the expectation that the asset will rise in value, the opposite of Short (or Short Position).

Short (or Short Position) : The sale of a borrowed security, commodity or currency with the expectation that the asset will fall in value, the opposite of Long (or Long Position).

Curve-Fitted : mathematically optimizing a model for a given set of historic data.