



CURRENCY SMART BETA

**Innovative Factor-Based
Currency Management**

**STATE STREET
GLOBAL ADVISORS®**

Our Currency Smart Beta strategy seeks to capture long-run currency risk premia, which we believe exist as compensation for country, liquidity and cyclical risk.



Who It's For

- Investors looking to replace historically undercompensated market-cap-weighted currency exposure imbedded in most international portfolios with a factor-based currency portfolio that's designed to offer better-compensated risk.
- Investors in absolute return currency strategies seeking a lower-cost alternative to add potential long-run positive returns from currency.



Why Use It

- Can increase diversification and add excess return relative to the unhedged currency exposures in most standard international benchmarks.
- Provides a low-cost alternative to absolute return currency strategies.

OUR SOLUTIONS

The baseline State Street Global Advisors (SSGA) Currency Smart Beta strategy is an equal-risk weighted combination of value, interest-rate carry and SSGA risk premia factor portfolios.

These individual factor portfolios should be considered as building blocks, one or more of which can be combined using weights that suit each investor. A more risk-averse investor may prefer a much higher weighting to value due to its historically negative correlation to equities.

Some may want to further increase the negative correlation by adding exposure to a momentum factor portfolio. A more risk-seeking investor may look to concentrate exposure on the higher expected return, but higher risk, carry and risk premium factors.

A Replacement for Imbedded Currency Exposure

The currency exposures imbedded in most international portfolios, which are usually market-cap weighted, tend to offer scant returns relative to very high risks.

Pairing a passive hedge with a smart beta strategy effectively replaces the imbedded currency basket with the smart beta basket. For example, a 50% passive hedge may reduce international portfolio risk by 2%, albeit at a modest cost. The hedger can then reallocate that 2% risk to a smart beta currency portfolio that we expect to have a return comfortably in excess of the cost of hedging.

The goal is to create a portfolio with the same or lower risk and higher expected return, producing a net efficiency gain.

A Replacement for Absolute Return Currency Mandates

Currency smart beta can potentially deliver a large percentage of the expected return of absolute currency strategies, but at a small fraction of the management fee.

Don't pay alpha prices for beta-like results! We work with each investor to customise a basket of factors that may replicate a substantial portion of their absolute return manager's performance.

HOW IT WORKS

Value, carry and momentum factors have a well-established history in the currency markets. The core idea is to measure the exposure of each currency to these factors to create long/short currency portfolios. Companies such as Deutsche Bank and Russell publish standardised benchmarks to track these portfolio returns.

We concentrate on the risk premia related to carry and value factors. By more precisely measuring exposure to these factors, we aim to deliver better risk-adjusted returns compared to the common naïve currency factor benchmarks.

THE BENEFITS

Currency Smart Beta offers investors a cost-effective approach to currency management for developed and emerging market currencies, with the potential to add returns from innovative factor-based investing.

It can be used on a standalone basis, often as part of a broader factor-based portfolio; more commonly, it is combined with a passive hedge to effectively replace the market-cap-weighted currency exposures imbedded in international portfolios, to create a more attractive long-run expected risk-return profile.

Constructing the Portfolio

We construct our smart beta factor portfolios using mean-variance optimisation. As long-run beta returns are a compensation for exposure to risk, expected beta returns should be balanced against risk to give a more efficient portfolio.

Interest Rate Carry

Simple carry portfolios take long positions in high-yielding currencies versus short positions in low-yielding currencies.

In our view, the systematic positive returns to carry represent the payment of a risk premium resulting from the presence of liquidity, cyclical, external balance and general country/political risks.

The average short-term interest rate tends to be higher for countries with high exposure to these risk factors.

Value

The value-tilted portfolio buys inexpensive currencies and sells expensive currencies as defined by our proprietary purchasing power parity model.

Risk Premia

The concept of risk premium moves beyond simple carry by directly measuring exposure to each risk factor (liquidity, cyclical, external balance and general country/political risks) to estimate the expected risk premium.

We buy currencies with a high expected risk premium and sell currencies with a low expected risk premium.

Using only interest-rate carry as an estimate of the expected risk premium is incomplete because the risk premium may be delivered to the investor through a combination of exchange rate appreciation and interest payments. In contrast, directly estimating the expected risk premium provides a more precise exposure of the beta captured by carry.

Momentum

While we don't include momentum in our model smart beta portfolio, we can replicate a publicly available currency momentum benchmark or custom build a simple momentum strategy to suit individual investors.

Momentum provides a lower expected return than carry, risk premium or value, and has a less-well-defined theoretical rationale.

However, being typically negatively correlated with equity portfolios it may be a useful addition for some investors.

About State Street Corporation

For four decades, State Street Global Advisors has served the world's governments, institutions and financial advisors. With a rigorous, risk-aware approach built on research, analysis and market-tested experience, we build from a breadth of active and index strategies to create cost-effective solutions. As stewards, we help portfolio companies see that what is fair for people and sustainable for the planet can deliver long-term performance. And, as pioneers in index, ETF and ESG investing, we are always inventing new ways to invest. As a result, we have become the world's third-largest asset manager with nearly US \$2.73 trillion* under our care.

* This figure is presented as of March 31, 2018 and includes approximately \$56 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

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A Smart Beta strategy does not seek to replicate the performance of a specified index and as such may underperform such an index. The factors to which a Smart Beta strategy seeks to deliver exposure may themselves undergo cyclical performance. As such, a Smart Beta strategy may underperform the market or other Smart Beta strategies exposed to similar or other targeted factors. In fact, we believe that factor premia accrue over the long-term (5-10 years), and investors must keep that long time horizon in mind when investing. While diversification does not ensure a profit or guarantee against loss, investors in Smart Beta may diversify across a mix of factors to address cyclical changes in factor performance. However, factors may have high or increasing correlation to each other.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Investing in futures is highly risky. Futures positions are considered highly leveraged because the initial margins are significantly smaller than the cash value of the contracts. The smaller the value of the margin in comparison to the cash value of the futures contract, the higher the leverage. There are a number of risks associated with futures investing including but not limited to counterparty credit risk, basis risk, currency risk, derivatives risk, foreign issuer exposure risk, sector concentration risk, leveraging and liquidity risks.