



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 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 Us

For nearly four decades, State Street Global Advisors has been committed to helping our clients, and those who rely on them, achieve their investment objectives. We partner with many of the world's largest, most sophisticated investors and financial intermediaries to help them reach their goals through a rigorous, research-driven investment process spanning both indexing and active disciplines. With trillions* in assets under management, our scale and global reach offer clients access to markets, geographies and asset classes, and allow us to deliver thoughtful insights and innovative solutions.

State Street Global Advisors is the investment management arm of State Street Corporation.

*Assets under management were \$2.56 trillion as of 31 March 2017. AUM reflects approx. \$33.33 billion (as of 31 March 2017) with respect to which State Street Global Advisors Funds Distributors, LLC serves as marketing agent; State Street Global Advisors Funds Distributors, LLC and State Street Global Advisors are affiliated.

ssga.com

State Street Global Advisors Worldwide Entities

Australia: State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services Licence (AFSL Number 238276). Registered office: Level 17, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240 7600. F: +612 9240 7611.

Belgium: State Street Global Advisors Belgium, Chaussée de La Hulpe 120, 1000 Brussels, Belgium. T: 32 2 663 2036. F: 32 2 672 2077. SSGA Belgium is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

Canada: State Street Global Advisors, Ltd., 770 Sherbrooke Street West, Suite 1200 Montreal, Quebec, H3A 1G1, T: +514 282 2400 and 30 Adelaide Street East Suite 500, Toronto, Ontario M5C 3G6. T: +647 775 5900.

Dubai: State Street Bank and Trust Company (Representative Office), Boulevard Plaza 1, 17th Floor, Office 1703 Near Dubai Mall & Burj Khalifa, P.O. Box 26838, Dubai, United Arab Emirates. T: +971 (0)4 4372800. F: +971 (0)4 4372818.

France: State Street Global Advisors France. Authorised and regulated by the Autorité des Marchés Financiers. Registered with the Register of Commerce and Companies of Nanterre under the number 412 052 680. Registered office: Immeuble Défense Plaza, 23-25 rue Delarivière-Lefoullon, 92064 Paris La Défense Cedex, France. T: (+33) 1 44 45 40 00. F: (+33) 1 44 45 41 92.

Germany: State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Authorised and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Registered with the Register of Commerce Munich HRB 121381. T: +49 (0)89 55878 400. F: +49 (0)89 55878 440.

Hong Kong: State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103 0288. F: +852 2103 0200. Ireland: State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Incorporated and registered in Ireland at Two Park Place, Upper Hatch Street, Dublin 2. Registered Number: 145221. Member of the Irish Association of Investment Managers. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300.

Italy: State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano) is a branch of State Street Global Advisors Limited, a company registered in the UK, authorised and regulated by the Financial Conduct Authority (FCA), with a capital of GBP 71'650'000.00, and whose registered office is at 20 Churchill Place, London E14 5HJ. State Street Global Advisors Limited, Milan Branch (Sede Secondaria di Milano), is registered in Italy with company number 06353340968 - R.E.A. 1887090 and VAT number 06353340968 and whose office is at Via dei Bossi, 4 - 20121 Milano, Italy. T: 39 02 32066 100. F: 39 02 32066 155.

Japan: State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81 3 4530 7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association.

Netherlands: State Street Global Advisors Netherlands, Apollo Building, 7th floor Herikerbergweg 29 1101 CN Amsterdam, Netherlands. T: 31 20 7181701. SSGA Netherlands is a branch office of State Street Global Advisors Limited.

State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

Singapore: State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826 7555. F: +65 6826 7501.

Switzerland: State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16.

United Kingdom: State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350.

United States: State Street Global Advisors, One Lincoln Street, Boston, MA 02111-2900. T: +1 617 786 3000.

Investing involves risk including the risk of loss of principal. Diversification does not ensure a profit or guarantee against loss.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.

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.