

THE NEW SMART BETA FACTOR EXPOSURE: U.S. DOLLAR SENSITIVITY

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There have been two very important trends in the asset management and exchange-traded fund (ETF) industry WisdomTree has pioneered over the last decade. First was the rise of [smart beta](#) or factor exposures to deliver strategic equity allocations designed to improve [risk-adjusted returns](#) by rebalancing funds based on the concept of [relative valuations](#). Second was the use of [currency-hedged](#) equities to more directly target the local market returns while neutralizing currency exposure. WisdomTree believes a third new category incorporates important elements of both trends by providing unique U.S. equity factor exposures related to currency sensitivity. Increasingly, views on the U.S. dollar have motivated a desire for international equities to be currency hedged, especially for exposures in Europe and Japan. Japan, a largely export-driven market with a negative [correlation](#) between its equities and its currency (the yen), has demonstrated how important currency could be to the performance of its stock market. As the yen weakened in 2013 and 2014, Japan equities¹ soared due to Japan’s improving export competitiveness and rising profits. **Currency Factor in U.S. Equities** But currency moves are not just important to foreign markets. In the U.S, we have also seen U.S. dollar strength impact stocks that are exposed to sales in foreign markets. It is widely known that a significant percentage of the revenues of U.S. companies in the [S&P 500 Index](#) come from abroad. These companies have reported large currency headwinds as part of their earnings statements this year. This can be seen in the relative performance of the S&P 500 Index against European² and Japanese exporters³, who have benefited from the yen and euro, respectively, weakening against the U.S. dollar. In the chart below, we look at the 12 months ending June 30, 2015, to indicate a period when the U.S. dollar strengthened significantly against both the euro and the yen. **Impact of U.S. Dollar Shown in European**



Sources: WisdomTree, Bloomberg. "Japan Exporters" refers to the WisdomTree Japan Hedged Equity Index universe. "Europe Exporters" refers to the WisdomTree Europe Hedged Equity Index universe. Period is from 6/30/14 to 6/30/15. Past performance is not indicative of future results. You cannot invest directly in an index. Index performance does not represent actual Fund or portfolio performance. A Fund or portfolio may differ significantly from the securities included in the Index. Index performance assumes reinvestment of dividends but does not reflect any management fees, transaction costs or other expenses that would be incurred by a portfolio or Fund, or brokerage commissions on transactions in Fund shares. Such fees, expenses and commissions could reduce returns.

• Europe and Japan

Exporters Perform Strongly: We can see that as the yen and the euro depreciated against the U.S. dollar, both Japan exporters and Europe exporters outperformed the S&P 500 Index. **The Newest Factor Tilt: Currency Sensitivity** Most smart beta indexes have a weighting process that tilts weight to factors such as [valuation](#), [quality](#), [momentum](#) or [low](#)

[volatility](#). For instance, WisdomTree's [Dividend Stream®](#) -weighted approach can be described as a modified market cap index that tilts market cap weight to stocks with higher [dividend yields](#). Mathematically, the *Dividend Stream* equals dividends per shares x shares outstanding, but it also equals market cap x dividend yield. WisdomTree believes currency sensitivity is an important factor for helping to explain portfolio returns and has thus incorporated it into an indexing process through a factor tilt that is conceptually similar to the dividend tilt described above. There are two ways WisdomTree incorporated this currency sensitivity into a new indexing approach by introducing two innovative Indexes:

1) Stock Selection: Focus on Local Economy versus Export-Oriented U.S. Stocks.

- **U.S. Local Economy Stocks = [WisdomTree Strong Dollar U.S. Equity Index](#):** These are firms that derive more than 80% of their revenues from within the United States. These companies tend to be less impacted by a strong-dollar environment—they aren't focused on selling their goods and services abroad, and their cost of imports improves with a rising purchasing power of the dollar. This Index also excludes Energy and Materials stocks, as the returns for those two sectors have been mostly negatively correlated to the returns of the U.S. dollar.⁴
- **U.S. Exporters = [WisdomTree Weak Dollar U.S. Equity Index](#):** These are firms that derived at least 40% of their revenue from exports, which means they tend to be more impacted by a strong-dollar environment, as they are focused on selling their goods and services abroad. Similarly, during a weak-dollar period, we'd expect these firms to become more competitive in selling their goods abroad.

2) Weighting: WisdomTree's currency factor Indexes tilt market cap weights to stocks whose returns are more sensitive (or correlated) to the returns of the U.S. dollar. The mathematical adjustment uses the rank of the correlation of each stock's returns relative to the returns of the U.S. dollar to smoothly tilt⁵ the starting market cap weight toward stocks whose returns have exhibited certain correlations with the returns of the U.S. dollar.

- a. The WisdomTree Strong Dollar U.S. Equity Index tilts weight to stocks whose returns have had *higher correlations* to the returns of the U.S. dollar.
- b. The WisdomTree Weak Dollar U.S. Equity Index tilts weight to stocks whose returns have been more *negatively correlated* (or lower correlated) to the returns of the U.S. dollar.

How These Strategies Work One of the most important macroeconomic forces impacting the market have been currency changes motivated by diverging [monetary policies](#). If the U.S. dollar continues to be strong over the coming years, as is WisdomTree's baseline view, this can provide a continued headwind to U.S. exporters and favor the WisdomTree Strong Dollar U.S. Equity Index. Conversely, if one views the U.S. dollar strength as a fleeting trend set to reverse, such an environment would favor U.S. exporters and the WisdomTree Weak Dollar U.S. Equity Index. ¹Refers to the [Tokyo Stock Price Index \(TOPIX\)](#) universe; source: Bloomberg. ²Refers to the [WisdomTree Europe Hedged Equity Index](#), tracked by the [WisdomTree Europe Hedged Equity Fund \(HEDJ\)](#) before fees and expenses. ³ Refers to the [WisdomTree Japan Hedged Equity Index](#), tracked by the [WisdomTree Japan Hedged Equity Fund \(DXJ\)](#) before fees and expenses. ⁴Refers to the [Federal Reserve U.S. Trade-Weighted Dollar Index](#). ⁵Technically, the correlation factor of the weighting uses an exponential weighting process based on the correlation rank. This correlation factor is 75% of the weight, while the market cap component is 25% of the weight.

For standardized performance and the most recent month-end performance click [here](#) NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

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DEFINITIONS

Smart Beta : A term for rules-based investment strategies that don't use conventional market-cap weightings.

Risk-adjusted returns : Returns measured in relation to their own variability. High returns with a high level of risk indicate a lower probability that actual returns were close to average returns. High returns with a low level of risk would be more desirable, as they indicate a higher probability that actual returns were close to average returns.

Relative value : The relationship between a particular attribute, e.g., a dividend, and the firm's share price compared to that of another firm.

Currency hedging : Strategies designed to mitigate the impact of currency performance on investment returns.

Correlation : Statistical measure of how two sets of returns move in relation to each other. Correlation coefficients range from -1 to 1. A correlation of 1 means the two subjects of analysis move in lockstep with each other. A correlation of -1 means the two subjects of analysis have moved in exactly the opposite direction.

S&P 500 Index : Market capitalization-weighted benchmark of 500 stocks selected by the Standard and Poor's Index Committee designed to represent the performance of the leading industries in the United States economy.

Valuation : Refers to metrics that relate financial statistics for equities to their price levels to determine if certain attributes, such as earnings or dividends, are cheap or expensive.

Quality : Characterized by higher efficiency and profitability. Typical measures include earnings, return on equity, return on assets, operating profitability as well as others. This term is also related to the Quality Factor, which associates these stock characteristics with excess returns vs the market over time.

Momentum Factor : 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.

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

Dividend yield : A financial ratio that shows how much a company pays out in dividends each year relative to its share price.

Monetary easing policies : Actions undertaken by a central bank with the ultimate desired effect of lowering interest rates and stimulating the economy.

Tokyo Stock Price Index (TOPIX) : A free float-adjusted market capitalization-weighted index that is calculated based on all the domestic common stocks listed on the Tokyo Stock Exchange First Section.

Federal Reserve U.S. Trade-Weighted Dollar Index : A measure of the U.S. dollar against its broad trade partner.