

SMART BETA GOES INTERNATIONAL

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The term [smart beta](#) is becoming more and more popular in describing indexes that, in short, diverge from a typical [market capitalization-weighted](#) approach. With such indexes, we believe that it is critical to understand the different tilts and biases introduced by the stock selection and constituent weighting rules of each index. Today, we're taking a deeper look into our broad-based international smart beta indexes and examining how our smart beta (aka fundamentally weighted) approach has performed internationally. Specifically: • Did these indexes tend to increase or decrease sensitivity to movements of the market? • Did they tend to tilt more toward [larger](#) or smaller stocks? • Were they more [value](#)-oriented, more [growth](#) oriented or somewhere in between? • Was there a similar anti-[momentum](#) bias as seen in the U.S., intuitively coming from our annual rebalance? Thanks to data published regularly on the Kenneth French Data Library, we are able to do a returns-based analysis that seeks to quantify answers to these questions through the process of [regression](#). We compared the broadly focused, developed international WisdomTree Indexes to the appropriate [MSCI EAFE Index](#) benchmarks and show their respective value and growth cuts. **Factor Exposures of International Equity**

Developed International Indexes	Market Factor	Size Factor	Value Factor	Momentum Factor	Model R-squared	Average Annual Returns
WT DEFA	0.99	-0.23	0.06	0.01	99.2%	4.99%
WT DEFA Equity Income	1.01	-0.34	0.18	-0.02	98.1%	4.69%
WT Int Large	0.98	-0.36	0.02	0.03	99.0%	4.53%
WT Int Mid	1.01	0.10	0.20	-0.05	98.8%	5.85%
WT Int Small	1.00	0.55	0.24	-0.06	98.4%	6.81%
MSCI EAFE	0.99	-0.16	0.05	0.01	99.7%	3.87%
MSCI EAFE Value	0.98	-0.19	0.29	-0.10	99.2%	3.27%
MSCI EAFE Growth	0.99	-0.12	-0.19	0.11	99.5%	4.39%
MSCI EAFE Mid	1.02	0.16	0.07	-0.02	99.0%	4.09%
MSCI EAFE Mid Value	0.95	0.14	0.37	-0.12	97.8%	4.24%
MSCI EAFE Mid Growth	1.07	0.18	-0.14	0.05	99.0%	3.80%
MSCI EAFE Small	1.06	0.68	0.12	-0.05	98.9%	4.73%
MSCI EAFE Small Value	1.03	0.60	0.35	-0.16	98.6%	5.66%
MSCI EAFE Small Growth	1.09	0.64	-0.12	0.05	98.9%	4.98%
MSCI EAFE IMI	0.99	-0.07	0.05	0.00	99.7%	4.05%

Sources: WisdomTree, Bloomberg, Zephyr StyleADVISOR, Kenneth French Data Library. Period 6/1/06–6/30/14 due to inception dates of the WisdomTree Indexes shown. Past performance is not indicative of future results. You cannot invest directly in an index.

Indexes

For definitions of terms and Indexes in the chart, visit our [glossary](#). **Market Factors Takeaways:** In our U.S. factor analysis, discussed in an earlier [blog post](#), the dividend-weighted indexes showed lower "market factor" sensitivity or market factor loadings. On the international front, the market sensitivity factors more closely resembled the traditional market cap-weighted indexes with readings close to 1.0. One reason for this is that the U.S. is an outlier country in terms of dividend [payout ratios](#). Internationally, the indexes provide greater representation and coverage of international markets. The indexes therefore provide market sensitivity close to the broad-market indexes. **Value Factor Takeaways:** All WisdomTree-related strategies listed above weight securities by their [Dividend Stream®](#). These strategies tend to tilt more toward the value segment of the markets. However, for the broad [WT DEFA Index](#), the value loading is almost identical to that of the MSCI EAFE Index. Furthermore, the [WT International LargeCap Dividend Index](#) had a value loading lower than that of the MSCI EAFE Index. One reason for this is country allocations. Japan, for instance would show a low price-to-book value ratio and may represent considerable weight in the value factors, whereas on a dividend basis, Japan is under-weighted compared to a market cap-weighted index. This would lead to a natural bias in dividend strategies away from loading to the value factor that has greater exposure to Japan on a price-to-book value basis. • The value factor is particularly strong in dividend strategies focused on small- and mid-cap segments. Although the small-cap segment has a much stronger value tilt than the mid-caps, both have a much larger tilt to the value spectrum than the broad market strategies. • Note that the [market cap-weighted](#) value [MSCI EAFE Mid Cap Value](#) and [MSCI EAFE Small Cap Value](#)

Indexes were more value-tilted than the dividend-weighted approach. The dividend weighting therefore was between the traditional market cap-weighted indexes and the value segments of those indexes when measured on sensitivity to this value factor. **Size Factor Takeaways:** In terms of size tilts, WT DEFA, [WT DEFA Equity Income](#) and WT International LargeCap Dividend have the biggest large-cap tilts when compared with all other strategies listed above. In other words, the three strategies have the “purest” large-cap return attribution in the developed international space. When we look at the WisdomTree strategies focused on the small-caps, we cannot describe these Indexes as solely exposed to the small-cap premium. Instead, the [WT International SmallCap Dividend Index](#) has an equally notable tilt to the value segment, through a methodology that weights its constituents by dividends. The capability to access multiple tilts within one indexing strategy is an important point to note. As we have previously discussed, Fama/French¹ has shown the persistence of both a small-cap and a value premium, both of which can be accessed by the WT International SmallCap Dividend Index. **Momentum Factor Takeaways:** While dividend strategies in the U.S. tend to display strong anti-momentum tendencies, it is less clear in the developed international space. Many of the WisdomTree strategies still have a small tilt toward being anti-momentum. **Knowing Factor Exposures can Help with Portfolio Construction** Knowing these [factor loadings](#), in our opinion, is only a first step. The critical question regards how to apply this information to portfolio construction. In a future blog post, we will examine how we might go about building a portfolio that matches the size exposure of the MSCI EAFE Index but uses different mixes of WisdomTree Index tools to get there. Read full research on International Smart Beta [here](#). ¹Fama and French: Refers to the factor work that Eugene Fama and Kenneth French have done to describe stock returns.

Important Risks Related to this Article

Dividends are not guaranteed, and a company's future ability to pay dividends may be limited. A company currently paying dividends may cease paying dividends at any time. Investments focusing on certain sectors and/or smaller companies increase their vulnerability to any single economic or regulatory development.

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

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

Market capitalization-weighting : Market cap = share prices x number of shares outstanding. Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.

Size capitalization : A measure by which a company's size is classified. Large caps are usually classified as companies that have a market cap over \$10 billion. Mid caps range from \$2 billion to \$10 billion. Small caps are typically new or relatively young companies and have a market cap between \$200 million to \$2 billion.

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.

Growth : Characterized by higher price levels relative to fundamentals, such as dividends or earnings. Price levels are higher because investors are willing to pay more due to their expectations of future improvements in these fundamentals.

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.

Regression analysis : statistical process for estimating the relationships among variables. It helps one understand how the typical value of the dependent variable (Y- variable) changes when any one of the independent variables is varied, while the other independent variables are held fixed.

MSCI EAFE Index : is a market cap-weighted index composed of companies representative of the developed market structure of developed countries in Europe, Australasia and Japan.

Dividend Stream : Refers to the regular dividends per share multiplied by the number of shares outstanding.

WisdomTree International LargeCap Dividend Index : A fundamentally weighted index that measures the performance of the large-capitalization segment of the dividend-paying market in the industrialized world outside the U.S. and Canada. The Index comprises the 300 largest companies ranked by market capitalization from the WisdomTree DEFA Index. Companies are weighted in the Index based on annual cash dividends paid.

MSCI EAFE Mid Cap Value Index : A free float-adjusted market capitalization-weighted equity index that captures mid-cap representation across developed markets around the world, excluding the U.S. and Canada, focusing on those with higher book value-to-market value ratios.

MSCI EAFE Small Cap Value Index : A free float-adjusted market capitalization-weighted equity index that captures small-cap representation across developed market countries around the world, excluding the U.S. and Canada, focusing on those with higher book value-to-market value ratios.

WisdomTree International SmallCap Dividend Index : A fundamentally weighted index measuring the performance of the small-capitalization segment of the US dividend-paying market. The Index is comprised of the companies that compose the bottom 25% of the market capitalization of the WisdomTree Dividend Index after the 300 largest companies have been removed. The index is dividend weighted annually to reflect the proportionate share of the aggregate cash dividends each component company is projected to pay in the coming year, based on the most recently declared dividend per share.

Factor loadings : For the purposes of this piece, factor loadings are synonymous with coefficients determined by a regression analysis. They provide estimates of the sensitivity of a series of returns to different external variables.