

# LOOKING UNDER THE HOOD OF SMART BETA

Jeremy Schwartz — Global Head of Research

04/21/2014

The recent months have seen a wide proliferation of the term “[smart beta](#),” which in its simplest terms indicates an index construction that does not weight constituents by [market capitalization](#) but incorporates some type of rules-based rebalancing process. A wide array of strategies are starting to have live performance histories greater than five years, and we evaluated the [WisdomTree Indexes](#) focused on U.S. equity markets with at least that much history. What are these various smart beta index strategies really doing when one looks under the hood? Some have called smart beta just “[small-cap tilted](#).” Some have called smart beta just repackaged [value](#) strategies, and others have even referred to it as making an [active](#) bet on the market. We undertook a rigorous [regression analysis](#) to help explain [factor loadings](#) of various indexing strategies to quantify how big a “bet” these strategies are making on various factors, which can help explain their return patterns and underlying strategy. **What Factors Drive Smart Beta?** Professors Eugene Fama and Kenneth French developed a factor-based approach to analyzing the performance of a particular investment strategy or index. In essence, there are four factors, each meant to have some degree of explanatory power over returns. It’s important to note that this analysis is wholly dependent upon the period of study: • **Market:** This factor is meant to denote exposure to the market’s “[risk premium](#)”—a figure that is calculated by looking at the equity market’s return minus the [risk-free rate](#). Higher values here indicate an increased sensitivity to potentially amplify the impact of market movements. • **Size:** This factor is meant to denote exposure to different market capitalization size segments. More negative values indicate exposure to the larger capitalization size segments, whereas more positive values indicate exposure to smaller capitalization size segments. • **Value:** One of the most widely referenced strategy style distinctions is the differentiation between “value” or “[growth](#)” exposure, as each can have a very unique [risk/return](#) profile. In these results, a more positive figure indicates a greater sensitivity to the value style, whereas a more negative figure indicates a greater sensitivity to the growth style. • **Momentum:** One factor that has received attention more recently is momentum, which measures the propensity of an investment strategy to capture different trends exhibited by the market. A more negative value here indicates essentially a lack of momentum, whereas a more positive value indicates a greater potential sensitivity to this factor. We used this framework to discuss how small-cap tilted our Indexes are, how value tilted, and how much market risk is inherent in these strategies. Some brief takeaways: • **Size Factor Takeaways:** The [WisdomTree LargeCap Dividend](#) and [Equity Income Indexes](#) indicated size factors more than twice that of the [S&P 500 Index](#). When critics characterize smart beta as being a tilt to small caps, they are clearly not talking about WisdomTree’s large-cap dividend or earnings approaches, which are more [large cap](#) than the S&P 500. • **Value Factor Takeaways:** No surprise here, WisdomTree’s dividend Indexes have heavy loadings to the value factor. We quantify it across our Indexes and note that some of the value exposures are as large as traditional market cap-weighted value indexes. Yet these Indexes were more than just value strategies, as value lagged over this period and these strategies performed better than value indexes, despite comparable or deeper value loading factors. One comment that is often made about smart beta indexing methodologies is that they require investors to look under the hood to evaluate the exposures they are getting. We agree and think that as investors learn what factors are driving the results in our smart beta approach, they will find that these new Indexes are efficient means of accessing smart, long-term-oriented investment approaches—at least in our view. To read our full factor analysis on our smart beta approach, click [here](#).

## Important Risks Related to this Article

Investments focusing on certain sectors and/or smaller companies increase their vulnerability to any single economic or regulatory development. This may result in greater share price volatility.

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** : 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.

**Small caps** : new or relatively young companies that typically have a market capitalization 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.

**Active** : Funds that attempt to outperform the market by selecting securities a portfolio manager believe to be the best.

**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.

**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.

**Risk premium** : Equity investments are not risk free, but it is thought that investors buy stocks because the returns they expect are high enough to allow them to take the risk.

**Risk-free rate** : Typically an interest rate on a bond issued by a government entity, where the risk of default is so small as to be deemed nonexistent.

**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.

**Risk** : Also standard deviation, which measures the spread of actual returns around an average return during a specific period. Higher risk indicates greater potential for returns to be farther away from this average.

**WisdomTree LargeCap Dividend Index** : Measures the performance of the 300 largest companies in the WisdomTree Dividend Index ranked by market capitalization. Weighting is by indicated cash dividends.

**WisdomTree Equity Income Index** : Measures the performance of the 30% highest-yielding dividend-paying equities within the WisdomTree Dividend Index, weighted by indicated cash dividends.

**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.

**Large-Capitalization (Large-Cap)** : A term used by the investment community to refer to companies with a market capitalization value of more than \$10 billion. Large cap is an abbreviation of the term "large market capitalization". Market capitalization is calculated by multiplying the number of a company's shares outstanding by its stock price per share.