WHAT IS THE BETA FOR SMART BETA?

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06/01/2017

The terms "smart beta" and "factor investing" have taken the industry by storm of late. At the same time, recent fiduciary pressures and the serial underperformance of actively managed strategies versus beta have been shepherding investors away from active management and into passively managed exchange-traded funds (ETFs).[1] Smart beta ETFs have thus provided a potential solution to those still seeking alpha, but with the desire to do it broadly, passively, inexpensively[2] and in a well-diversified manner. With that being said, the smart beta indexes that many of these ETFs track are not broad and diversified market exposures. In fact, many are instead concentrated positions seeking to maximize desired factor exposures. While these may be "smart," are they really "beta"?

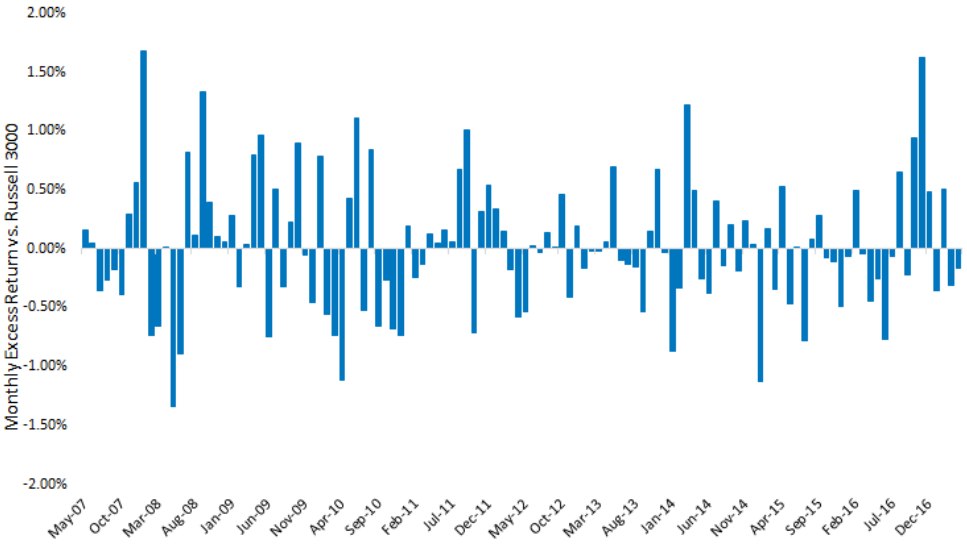
What Is Tracking Error and Why Does It Matter?

One helpful way to answer that question is through the statistic known as tracking error. For many, tracking error inhabits the hazy world of both understood and misunderstood, where we know basically what it means but perhaps can't explain it. In short, tracking error is the standard deviation of excess return versus a benchmark. So, the more an index's returns are like the benchmark, the lower the tracking error would be, and vice versa. In general, the industry has accepted the 4% to 7% range to be the typical tracking error of actively managed strategies, while below 2% would be more "beta-like."

The WisdomTree Earnings Index, for example, selects from a total market universe of U.S. companies with positive trailing 12-month earnings and weights them by their share of aggregate earnings paid. Not only does this give you exposure to academically proven alpha generators such as the value and quality factors, but also 1,864 stocks with more than $22 trillion of market capitalization.[3] This broad and inclusive methodology, one would expect, has the potential to behave very similarly to traditional beta indexes, implying a low tracking error while also providing the potential for alpha

In the chart below, we observe the excess return of the WisdomTree Earnings Index versus the Russell 3000 Index every month. These monthly differences are the "meat" of the tracking error calculation and help identify how "beta" an index actually is. As you can see, the WisdomTree Index over the last decade has been within 2% of the Russell 3000 monthly return 100% of the time.

WisdomTree Earnings Index Monthly Excess Return vs. Russell 3000



	10-Year Summary Statistics as of 4/28/2017							
Index	**Return (%)**	**Std Dev (%)**	**Beta**	**Alpha (%)**	**Sharpe Ratio**	**Tracking Error (%)**	**Information Ratio**	**Correlation**
WisdomTree Earnings	7.57	15.51	0.98	0.46	0.45	1.93	0.17	0.99
Russell 3000	7.23	15.79	1.00	0.00	0.42	0.00	0.00	1.00

Sources: WisdomTree, Zephyr StyleADVISOR, as of 4/28/17. 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.

For definitions of terms in the chart, visit our glossary.

When you take the standard deviation of these monthly returns, you are left with a tracking error of 1.93% versus the Russell 3000 Index, a below 2% outcome. We also see that the WisdomTree beta is 0.98, and the correlation is 0.99, both indicating that the WisdomTree Earnings Index has behaved very much like beta over the last decade.

What is the meaningful difference between these Indexes if not their behavior? Over this 10-year period, the WisdomTree Earnings Index added, on average, 34 basis points (bps) per year over the Russell 3000 Index. This, combined with its lower volatility, led it to have a higher Sharpe ratio, a measure of risk-adjusted returns. Now, to be clear, with a tracking error this low, the alpha potential versus the market is limited. We do not dispute that a smart beta index with 6% or 9% tracking error does have the potential to outperform beta by much greater margins, but it also means that there is potential for greater underperformance as well. This non-beta experience over time, for advisors, may introduce career risk.

Conclusion: Occam's Razor

Occam's razor is often used as evidence that simplicity is key. With that being said, we believe that the WisdomTree Earnings Index does not try to act smarter than it really is. It behaves like beta, but tilts toward alpha. It includes only profitable companies and weights them by their share of earnings. That's it. It is a simple yet elegant re-engineering of broad market exposure, and one that has been tracked by an investable ETF for more than a decade (The WisdomTree Total Earnings Fund, EXT). To us, there are two ways to consider "what is beta for smart beta?" The first is a multifactor approach, providing consistent exposures to multiple factors over time, but the second is an index that truly looks and feels like beta, or broad diversified market exposure, and does it in a way that seeks to provide alpha.

[1]S&P Dow Jones SPIVA Scorecard.

[2]Ordinary brokerage commissions apply.

[3]Source: WisdomTree, as of 5/18/17.

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You cannot invest directly in an index.

DEFINITIONS

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

Active manager : Portfolio managers who run funds that attempt to outperform the market by selecting those securities they believe to be the best.

Beta : A measure of the volatility of a security or a portfolio in comparison to a benchmark. In general, a beta less than 1 indicates that the investment is less volatile than the benchmark, while a beta more than 1 indicates that the investment is more volatile than the benchmark.

Passive : Indexes that take a rules-based approach with regular rebalancing schedules that are not changed due to market conditions.

Alpha : Can be discussed as both risk-adjusted excess return relative to a specific benchmark, or absolute excess return relative to a benchmark. It is sometimes more generally referred to as excess returns in general.

Standard deviation : measure of how widely an investment or investment strategy's returns move relative to its average returns for an observed period. A higher value implies more "risk", in that there is more of a chance the actual return observed is farther away from the average return.

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 tim.

Quality Factor : Excess returns achieved by companies exhibiting higher quality or profitability vs the market. Typically measured using operating profitability, return on equity and/or return on assets. .

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.

Russell 3000 Index : Measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

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.

Basis point : 1/100th of 1 percent.

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

Sharpe ratio : Measure of risk-adjusted return. Higher values indicate greater return per unit of risk, specifically standard deviation, which is viewed as being desirable.

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.