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**‘Smartly’ Diversify your Portfolio with Different ETF Methodologies**

For an investor it is crucial to be aware of the weighting methodology of constituent stocks in exchange traded funds (ETFs). All ETFs are not equal and there is more than one way of gaining low cost equity diversity. The most common equity index funds typically weight holdings by market capitalization - or the total value of a company’s shares outstanding. For instance, the S&P 500 (SPY) is a market capitalization weighted index (or MCWI). The market capitalization of each stock is determined by taking the share price and multiplying it by the number of shares outstanding. Market-cap-weighted indexes tend to overweight expensive stocks and underweight cheaper stocks. Some say this is just how things should go since the best performing stocks should be able to run their course and not encounter the higher tax friction and transaction costs of unnecessary turnover.

In turn, EWI treat all stocks the same with weighting allocation and underweight the large stocks by overweighting a large number of smaller stocks. The S&P 500 EWI is rebalanced quarterly to coincide with the quarterly share adjustment of the S&P 500. For example, in the past 10 years the average annual turnover for the S&P 500 equal weighted index (or EWI) has been about 25%, much higher than the S&P 500’s MCWI turnover of 6%. EWI constituent weightings are not correlated with their expected returns, tend to have lower stock sector concentration, yet have higher liquidity constraints since all stocks have the same weighting regardless of market cap. The 10 largest stocks represented just about 16% of the S&P 500 Index, whereas those same 10 companies only represent roughly 2% of the EWI. A leading EWI is the Guggenheim S&P 500 Equal Weight ETF ([RSP](http://community.investopedia.com/q.aspx?s=rsp)). As of June 30, 2014, RSP’s average annual return for the decade was +10.1% vs. the SPY of +7.7%.

There are also different sector exposure between MCWI and EWI. EWI has broad diversification across market segments and this may help reduce concentration risk with more sector diversity. That said, the S&P 500 EWI has been consistently overweight materials, consumer discretionary and utilities, and underweight energy, health care and telecommunication services relative to the S&P 500 MCWI.

It should be no surprise that the performance can differ over time. EWI is considered to have a small cap bias and will outperform market cap weighted ETFs when the smaller stocks in an index outperform its larger stock counterparts. The S&P 500 EWI performed strongly in 2009, gaining +45% versus a +26% advance for the MCWI. In fact, according to S&P Dow Jones Indices, in the past 20 years ended 2012, the S&P 500 EWI had outperformed the S&P 500 MCWI by a compounded average of +2.0% annually. Yet, risk as measured by volatility or standard deviation tends to be higher on the S&P 500 EWI versus the S&P 500 MCWI.

However, holding both EWI and MCWI can smooth the investor’s ride. For example, in a period that covers the tech bubble 2000-2006, the S&P 500 MCWI annualized return was only +1%, whereas EWI was +9.1%. Again, this can be partly explained by the fact EWI rebalances all positions quarterly, selling winners and buying laggards and this tilts the EWI portfolio slightly toward value stocks. And this period covered the tech bubble, when MCWI was severely overweight in market capitalization by technology stocks. However, in an earlier period of 1995-1999, S&P 500 annualized return was 29% versus the EWI of 21%.

Many subscribe to the view that there are cycles of outperformance between small cap value and large cap growth style stocks. Accordingly, an investor can consider MCWI for growth times and EWI for biasness toward value expectations; however, using a large growth ETF (RPG) or small cap value ETF (VBR) would serve that purpose better - but this would also have less overall diversity.

Risk as measured by volatility or standard deviation tends to be higher on the S&P 500 EWI versus the S&P 500 MCWI. For the five years ending December 2007, the annualized standard deviation was 10.97% for the S&P EWI vs. 8.61% for the S&P 500 MCWI.

But do EWI and MCWI cover the gamut for ETF diversity? Indeed, it has already been highlighted that they both have their own merits and limitations. Modern Portfolio Theory suggests that diversifying a portfolio with different return, risk and correlation characteristics may in fact reduce the overall portfolio risk. This is where domestic smart beta ETFs come into play with reportedly superior long-term performance: PowerShares FTSE RAFI U.S. 1000 (PRF) for large-cap, WisdomTree MidCap Earnings (EZM) for mid-cap, and RevenueShares Small Cap (RWJ) and WisdomTree SmallCap Dividend (DES) in small-cap. For example, PowerShares FTSE RAFI US 1000 (PRF) seeks to address some of the problems address while retaining the benefits of a traditional index fund. It weights its holdings according to fundamental measures of size, including book value, cash flow, sales, and dividends, rather than market cap. Research has shown that these smart beta ETFs outperformed their categories overall for the past five years. However, these smart beta ETFs also tend to cost more and this can drag on portfolio returns.

Smart beta is a methodology combining some active scheme with a passive managed fund. There are approximately 60 smart beta ETFs now with about half of them launched as recent as 2011. Smart beta is still an emerging player and in the first quarter of 2014 represented only about $14.5 billion worth of assets compared to approximately $1.75 trillion worth of pure passive ETF assets. When an investor adds these different ETF methodologies into a portfolio, it should be no surprise the results would be different than the traditional MCWI S&P 500 (SPY). If one runs the performance of an equal allocation (of 1/3) to SPY, RSP and PRF for the period of 9/25/08-9/25/14, then this three ETF portfolio had a compounded annual growth rate or CAGR would be +12.3%, whereas just having SPY would be +10.8%; the volatility of the two portfolios would be largely similar.

Similarly, if you ran a more diverse five ETF portfolio (or 1/5) to SPY, RSP, PRF, RWJ and EZM for the same six year period, then this portfolio’s CAGR would have been +13.0% versus +10.8% for just SPY. And in certain years, there would be sharp difference, such as in 2009 SPY returned +26.4% whereas this portfolio of five ETFs returned +41.7%.

The takeaway is that investors should consider these different ETF methodologies to replicate exposure to broad indexes and at least be cognizant that an investor can diversify the exposure to the S&P 500 by choosing various alternative ETF schemes. Further, investors should consider other ETFs than just large cap weighted to add greater diversity and offer potential for higher risk-adjusted returns. Smart beta is here to stay and there are a sundry of studies of how these can outperform vanilla ETFs. There are very few absolutes in the world of investing and there are times of outperformance for large caps, small cap, value and growth – yet, if you are trying to apply ETFs as a low cost and efficient method to index your portfolio returns, consider ETF methodology diversity.