SIZING UP THE SIZE FACTOR

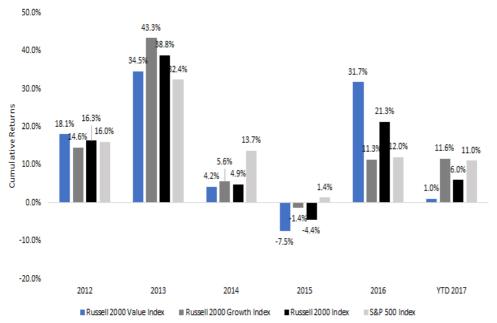
Christopher Gannatti - Global Head of Research 07/31/2017

It seems like everywhere across the investment landscape in 2017 there is talk about "<u>factors</u>." While this isn't necessarily a new discussion (research has been done for decades regarding the drivers of excess returns within equities), it is easier than ever to pick and choose the factors to which you would prefer exposure.

Size: Popular but Volatile

when people get excited about changes—changes in policy, changes in growth expectations, changes in political leadership—we've tended to see this excitement show up in the behavior of small-cap stocks. We saw this most recently during the "Trump trade," with the bulk of the performance response coming between the November 8, 2016, election victory and the January 20, 2017, inauguration.





Sources: WisdomTree, Bloomberg, with data over last five calendar years (12/31/11 to 12/31/16) and 2017 year-to-date (12/31/16 to 7/14/17). Past performance is not indicative of future results. You cannot invest directly in an index.

• In 2012 and 2014, the <u>Russell 2000 Value Index</u> and the <u>Russell 2000 Growth Index</u> performed very similarly. Even the approximate 9% difference between these indexes in 2013 wasn't particularly noteworthy because U.S. equity market indexes across the board tended to be up 30% to 40% that year.



• The most recent "tough" year for small caps was 2015, and it was clear that the Russell 2000 Value Index was the laggard, as the Russell 2000 Growth Index was nearly flat. But 2016 saw greater than 20% outperformance of the Russell 2000 Value Index vs. the Russell 2000 Growth Index. In 2017 through July 14, these indexes have reversed again, with the Russell 2000 Growth Index now outperforming the Russell 2000 Value Index by 1,000 basis points (bps).

Value, Growth, Core...What's the "Right" Choice?

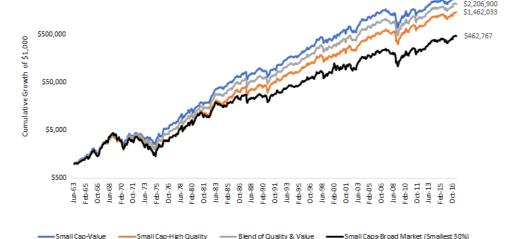
Based on what we're seeing in more recent index behavior, trying to time the shift between value and growth could carry with it a significant opportunity cost *and* the risk of being incorrect. Intuitively, one might say, "why not just own all the stocks?" which could then lead to the Russell 2000 Index-very much the status quo choice. But as we mentioned before, it has never been easier to fine-tune exposure to a market segment through the use of factors.

Over the Long Term, Did Size or "Size-Plus" Lead to Outperformance?

If we take a longer-term view and look back to June 1963, we know that owning small caps was one way to outperform over the long-haul. However, we can see just by looking at the performance of all publicly traded small caps that the performance of Small Cap-Value and Small Cap-High Quality stocks (see definitions below the chart) dramatically outperformed.

Small Caps Plus a Factor Led to Significant Outperformance

Small-Cap Focus	_	Avg. Ann. Std. Dev.	Sharpe Ratio	vs. Smallest 30%		
				Information Ratio	Beta	Correlation
Small Cap-Value	16.04%	19.22%	0.59	0.62	0.87	0.95
Small Cap-High Quality	14.46%	20.38%	0.48	0.36	0.91	0.95
Blend of Quality & Value	15.34%	19.52%	0.54	0.58	0.89	0.96
Small Caps-Broad Market						
(Smallest 30%)	12.05%	21.17%	0.34	0.00	1.00	1.00



Sources: WisdomTree, Kenneth French Data Library, with data for 6/30/1963 through 5/31/2017. Past performance is not indicative of future results. Small Cap-Value refers to listed U.S. stocks below the median market capitalization level and in the top 30% when ranked by the book-to-market value ratio. Small Cap-High Quality refers to U.S. stocks below the median market capitalization level and in the top 30% when ranked by operating profitability. Blend of Quality & Value refers to Small Cap-Value and Small Cap-High Quality, split 50-50 and rebalanced annually. Small Caps-Broad Market refers to all listed stocks in the bottom 30% of the total U.S. market capitalization.

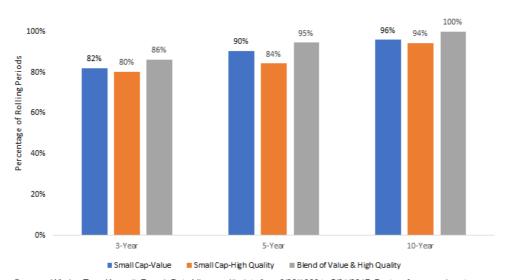


- Over this very long period, Small Cap-Value (defined as a focus on small firms with high book-to-market value ratios) had the strongest returns and, by a small margin, the lowest risk.
- If we knew that Small Cap-Value would always outperform over all periods, then there would be no need to look at any other factors, but no factor outperforms in all markets, of course. Since "growth" isn't a long-term alpha-generating factor, High Quality (a focus on firms with higher operating profitability) offers the potential for an interesting foil to value.
- Instead of just "owning all of the stocks," which we alluded to with the Russell 2000 Index choice earlier, something that we find to be of greater interest is intelligently blending factors. A 50-50 blend of Small Cap-Value and Small Cap-High Quality led to outperformance over "just holding them all," as well as enhanced risk/return characteristics.

Better Risk-Adjusted Performance

If we ask clients what they really want from the ever-expanding toolkit of options in portfolio construction, the single most popular answer is "better risk-adjusted performance." One way to put a number to this is through the <u>Sharpe ratio</u>. Over the long-term period going back to June 1963, we asked a simple question: Over 3-, 5- and 10-year rolling periods, did Small Cap-Value, Small Cap-High Quality or the Blended Approach provide the greatest chance of a Sharpe ratio stronger than just "owning all the small caps"?

Blending Quality & Value Means a Better Chance at a Higher Sharpe Ratio



Sources: WisdomTree, Kenneth French Data Library, with data from 6/30/1963 to 5/21/2017. Past performance is not indicative of future results. Small Cap-Value refers to listed U.S. stocks below the median market capitalization level and in the top 30% when ranked by the book-to-market value ratio. Small Cap-High Quality refers to U.S. stocks below the median market capitalization level and in the top 30% when ranked by operating profitability. Blend of Value & High Quality refers to Small Cap-Value and Small Cap-High Quality, split 50-50 and rebalanced annually.



• The Blend had a stronger Sharpe ratio a greater percentage of the rolling periods than either Value or High Quality independently. This shows that there is enough of a benefit from the factors delivering performance at different times that holding both in tandem was actually stronger than looking at either individually.

WisdomTree Designed Its Quality Dividend Growth Approach with this Blend in Mind

For more than 11 years, the WisdomTree SmallCap Dividend Index has generated a strong live performance track record. While including only dividend payers is one way to avoid lower-quality small caps, in 2013, WisdomTree developed a new approach—still focused on dividend payers (therefore tilted toward value) but also ranking stocks by their three-year average return on equity and return on assets. The WisdomTree U.S. SmallCap Quality Dividend Growth Index represents the marriage of Quality and Value, similar to the blends we studied above.

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DEFINITIONS

<u>Factor</u>: Attributes that based on its fundamentals or share price behavior, are associated with higher return.

<u>Size Factor</u>: the average returns of small portfolios minus the average returns of the large portfolios after adjusting for growth or value tendencies.

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

Small-cap growth: Refers to the Russell 2000 Growth Index universe.

<u>Value</u>: 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.

Russell 2000 Value Index: measures the performance of small-cap value segment of the U.S. equity universe. It includes those Russell 2000 Index companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Growth Index: Measures the performance of the small-cap growth segment of the U.S. equity universe. It includes those Russell 2000 Index companies with higher price-to-book ratios and higher forecasted growth values.

Basis point : 1/100th of 1 percent.

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.

<u>Risk-adjusted returns</u>: 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.

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.

Return on Equity (ROE): Measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Return on assets (ROA): Firm profits (after accounting for all expenses) divided by the firm's total assets. Higher numbers indicate greater profits relative to the level of assets utilized to generate them.

