Active share has been making headlines in the investment world since 2009, when it was broadly introduced by former Yale professors Martijn Cremers and Antti Petajisto. Against the backdrop of a performance drought for active equity managers, many pundits, practitioners, and members of the financial media have embraced active share as an easy-to-compute measure of portfolio “activeness” that is also predictive of future excess returns.

Unfortunately, key lessons from the literature are frequently oversimplified, if not outright misunderstood. In this paper, we examine three major misperceptions regarding active share. In addition, we suggest an approach to equity management that achieves active share in a manner that is both supported by empirical research and that may serve as the basis for reliable building blocks to be used in multi-manager structures.

MISPERCEPTION #1

When it comes to active share, more is always better.

REALITY

High active share is associated with outperformance only when factor betting is constrained.

In their 2009 research paper, Cremers and Petajisto proposed two measures—active share and tracking error—as indicators of different dimensions of active management. Active share, the authors suggested, was a reasonable proxy for stock selection, or how a portfolio differed from its index in terms of individual stock allocations. Tracking error, on the other hand, was more related to factor betting—that is, deviations from a benchmark in terms of factors such as sectors, market capitalization, or investment style (“value” or “growth” stocks).

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measured By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Selection</td>
<td>Active share</td>
</tr>
<tr>
<td>Example: Execution</td>
<td>of a new product</td>
</tr>
<tr>
<td>Factor Betting</td>
<td>Tracking error</td>
</tr>
<tr>
<td>Risk that affects</td>
<td>Example: Sectors,</td>
</tr>
<tr>
<td>groups of stocks.</td>
<td>market capitalization, style.</td>
</tr>
</tbody>
</table>

With the two dimensions of active management defined and measured, Cremers and Petajisto examined the effect of each on performance. The authors found that funds with high active share tended to outperform their benchmarks, while those with lower active share did not. And so the “High active share good, low active share bad” mantra was born.
A more nuanced observation, however, revolves around the relationship between active share and tracking error. Not only are the two measures positively correlated, but beyond a certain point the increases in active share can be accompanied by exponential increases in tracking error, as shown in Chart 1.

**CHART 1. AT HIGHER LEVELS OF ACTIVE SHARE, TRACKING ERROR MAY INCREASE DRAMATICALLY**

![Chart 1](image)

Why the significant increase in tracking error as active share moves higher? The answer lies in how managers achieve active share. A long-only manager can achieve active share in three ways: by excluding index constituents, by owning index constituents at different weights, and by owning off-index securities. If a manager generates very high active share by heavily overweighting small index names or by investing significantly in off-index positions, the resulting portfolio is likely to have factor exposures—sector weights, market capitalization tilts, or otherwise—that are markedly different than the index. These variations, in turn, can drive significant volatility of excess returns.

The relationship between active share and tracking error is critical to interpreting the active share findings because, as shown in Table 2, the two variables affect performance in opposing ways when considered simultaneously. While increasing active share has a positive association with performance, increasing tracking error has historically demonstrated a negative association.

**TABLE 2. EFFECT OF A 1% INCREASE IN ACTIVE SHARE AND TRACKING ERROR ON ANNUALIZED EXCESS RETURNS, 1992–2009**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Average Annual Alpha (Net of Fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Betting</td>
<td>-2.19%</td>
</tr>
<tr>
<td>Concentrated Funds</td>
<td>-0.89%</td>
</tr>
<tr>
<td>Diversified Stock Picking</td>
<td>1.39%</td>
</tr>
</tbody>
</table>


The significant implications of this relationship were clarified in Petajisto’s 2013 research update. After extending the original study through the financial crisis of 2008–09, the author found that only diversified stock pickers—that is, funds with high active share that also constrained factor bets (as indicated by their lower tracking error)—outperformed.

**TABLE 3. HISTORICALLY, ONLY DIVERSIFIED STOCK PICKERS HAVE OUTPERFORMED**

Average performance of three active manager types, 1990–2009

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Average Annual Alpha (Net of Fees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Betting</td>
<td>-2.19%</td>
</tr>
<tr>
<td>Concentrated Funds</td>
<td>-0.89%</td>
</tr>
<tr>
<td>Diversified Stock Picking</td>
<td>1.39%</td>
</tr>
</tbody>
</table>


The true lesson of the active share research, therefore, is not that investors should maximize active share but rather that they should seek active share that is high relative to tracking error. Indeed, as the author notes, “High tracking error is not desirable because funds that focus on factor bets underperform and even concentrated managers who combine active stock selection with factor bets have underperformed.” In other words, the potential benefits of active stock picking (best measured by active share) can be offset by the negative impact of factor betting (best measured by tracking error).
What is the right balance between active share and tracking error? That depends on an investor’s objectives and tolerance for tracking error. For example, within the context of a multi-manager structure that demands reliable building blocks, lower tracking error strategies that deliver more consistent excess returns and style consistency may be preferred.

**MISPERCEPTION #2**

Managers with similar active share should deliver similar results.

**REALITY**

Active share can be achieved in a variety of ways, and understanding the sources of activeness can yield critical insight into a manager’s approach. A major appeal of active share is the ease of computation: simply sum a portfolio’s absolute active weights and divide by two. This simplicity, however, comes at a cost. Specifically, a portfolio’s level of active share says nothing about how that activeness is achieved or the manner in which various active positions may interact.

Take active sector bets, for example. As Table 4 demonstrates, sector leadership varies dramatically from year to year, and the penalty for misplaced bets can be severe—over the past five years the average difference between the top-performing and worst-performing sectors in the S&P 500® Index was 32%.

The potential impact of misplaced, correlated factor bets may help explain why so many active managers fail to outperform their benchmarks. In 2014, for example, only 21% of mid-cap value mutual funds outperformed the Russell Midcap® Value Index, according to Morningstar. While undoubtedly there were myriad contributors to the performance shortfalls, many managers came into 2014 with large underweights to utilities and REITs, presumably based—at least in part—on the view that interest rates would rise (see Table 5).

**TABLE 4. SECTOR LEADERSHIP IS VOLATILE AND DIFFICULT TO PREDICT**

*Annual returns for the S&P 500 Index and its sectors, 2010–14*

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumer Disc</th>
<th>Utilities</th>
<th>Financials</th>
<th>Consumer Disc</th>
<th>Utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>28%</td>
<td>20%</td>
<td>29%</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>2011</td>
<td>28%</td>
<td>14%</td>
<td>24%</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>2012</td>
<td>22%</td>
<td>13%</td>
<td>18%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>2013</td>
<td>20%</td>
<td>6%</td>
<td>18%</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td>2014</td>
<td>6%</td>
<td>15%</td>
<td>16%</td>
<td>32%</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Source:** Bloomberg. Past performance is no guarantee of future results. For illustrative purposes only.
Contrary to consensus expectations, interest rates steadily declined throughout 2014, providing a tailwind for these “bond proxy” sectors and detracting from the relative performance of portfolios that were underexposed.

It is important, therefore, to consider not only a manager’s absolute level of active share but also the sources and potential implications of that activeness as well. If a manager achieves active share by making just a few large sector bets that are highly correlated—such as simultaneously underweighting interest-rate-sensitive groups like utilities and REITs (real estate investment trusts)—the effect on returns and tracking error may compound. Alternatively, if another manager makes deviations that are independent or even offset, such as over- or underweighting individual stocks while remaining sector neutral to the index, the effects on return may not compound and could in fact diversify each other. While “headline” active share for both portfolios may be similar, all else equal, the first manager is taking a low-breadth approach characterized by a small number of big factor bets. Meanwhile, the second manager is demonstrating a high-breadth approach characterized by a greater number of more modest, stock-specific positions.

As a supplement to active share, investors may wish to consider another measure of a portfolio’s deviation from its benchmark: active specific variance. This measure quantifies the portion of a portfolio’s total variance (that is, volatility of excess returns versus a benchmark) coming from stock-specific risk as opposed to factor risk. As shown in Chart 3, portfolios with similar levels of active share may differ dramatically in their sources of portfolio variance.

While active share may be helpful in quantifying a manager’s level of overall activeness, decomposition of portfolio variance can provide additional insight into the sources of that variance and distinguish true stock pickers from factor bettors.

**MISPERCEPTION #3**

Combining individual strategies with high active share will yield a multi-manager structure with high active share. 

**REALITY**

Style inconsistency and overlapping exposures may actually dilute the overall activeness of a multi-manager allocation.

Since active share may be achieved through off-index allocations, it is perhaps unsurprising that portfolios with very high levels of active share tend to demonstrate greater degrees of style drift (see Chart 4).
Style drift, of course, potentially complicates allocations within a multi-manager structure. If, as in the example shown in Chart 5, a mid-cap product drifted up into the large-cap space while a large-cap manager simultaneously gravitated down in capitalization, the result could be unintended overlap that would reduce the benefits of diversification.

Style, however, isn’t the only factor that can lead to unintended overlap. Portfolios may end up gravitating toward each other on any number of factors, such as the aforementioned underweighting of interest-rate sensitivity in 2014. As a result, what are believed to be two distinct portfolios with complementary exposures may end up “doubling down” on particular factors over time.

Even without style drift, the activeness of individual portfolios may be neutralized in multi-manager structures. For example, many large cap managers achieve high active share by chronically investing in smaller capitalization stocks. Although this manager isn’t drifting per se, the lack of adherence to the style mandate may be problematic if the portfolio is paired with a small cap strategy, especially one that tends to skew higher in capitalization.

To illustrate this point, consider a multi-manager structure comprised of five distinct portfolios currently available for investment (see Table 6). Each individual strategy boasts active share that would be considered high within its respective category, yet when combined, the overall active share of the multi-manager structure is meaningfully lower because overlapping exposures cancel each other out.
Managers deriving active share from diversified, stock-specific positions are more likely to assemble portfolios that are true to style and more closely reflect their respective benchmarks in terms of factor exposures. Naturally, these portfolios would not be expected to demonstrate headline active share that rivals managers running highly concentrated portfolios or making large, off-index allocations. These “factor neutral” portfolios, however, are less likely to overlap with other strategies, thereby resulting in an aggregate, multi-manager active share that will be closer to a weighted average of its components, and not diluted as in the example above.

**BETTER BUILDING BLOCKS: DIVERSIFIED, FACTOR NEUTRAL PORTFOLIOS**

As we have seen, the true lessons of the active share research are more subtle and nuanced than conventional wisdom suggests. While the results support active stock selection, only diversified approaches that also constrain factor bets have, historically, outperformed. Despite these findings, the active management industry continues to march in the opposite direction. As shown in Chart 6, large cap value and mid cap value managers are—intentionally or not—allocating meaningful portions of their risk budgets to factor betting. Considering the negative implications of factor betting on excess returns, this trend may help explain the performance droughts in which many active equity managers find themselves today.

Active managers’ increased proclivity for factor betting also poses challenges for investors constructing multi-manager portfolios. Ultimately, a well-intended focus on high active share strategies may lead an investor to building blocks that not only underperform but also do so with high degrees of style drift. As these building blocks shift, unwanted overlap and dilution of active share at the aggregate level may follow.

**By Adam Backman, CFA, Product Strategist; Drew Willey, Product Strategist; Ron Vlieger, CFA, Sr. Financial Writer**
Alpha is a measure of risk-adjusted performance. It is the risk-adjusted excess return of a fund relative to the fund’s benchmark.

Correlation is a statistical measure that indicates how closely two entities (e.g., securities, indexes, or portfolios) move in relation to each other. A correlation of 1.0 indicates that a move up or down by one is matched by a move in the same direction by the other. A correlation of -1.0 indicates that a move up or down will be matched by move in the opposite direction. A correlation of 0.0 indicates that the two entities have no statistical relationship.

Tracking error is commonly defined as the time-series standard deviation of the divergence between a fund return and its benchmark index return. A typical active manager aims for an expected return higher than the benchmark index, but at the same time wants to have low tracking error to minimize the risk of significantly underperforming the index.

Active Share is a methodology used to evaluate a fund’s actual performance and volatility against a benchmark. The methodology is not an indicator of how a specific investor’s investment will perform. This should not be used as a tool or evaluation in making any investment decision. We strongly recommend that you consult with your financial advisor before making an investment decision. Neither diversification nor asset allocation can guarantee a profit or protect against loss in declining markets.

The S&P 500® Index is widely regarded as the standard for measuring large cap U.S. stock market performance and includes a representative sample of leading companies in leading industries.

The Russell Midcap® Value Index measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000® Value Index. Index is unmanaged, does not reflect the deduction of fees or expenses; and is not available for direct investment.

The Russell 1000® Index measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index.

The Russell 1000® Value Index measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The Russell 1000® Growth Index measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.


The Russell 2000® Growth Index measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 3000® Index measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market.

Morningstar Mid-Cap Value Funds Average: Some mid-cap value portfolios focus on medium-size companies while others land here because they own a mix of small-, mid-, and large-cap stocks. All look for U.S. stocks that are less expensive or growing more slowly than the market. The U.S. mid-cap range for market capitalization typically falls between $1 billion and $9 billion and represents 20% of the total capitalization of the U.S. equity market. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow).

Indexes are unmanaged, do not reflect the deduction of fees or expenses, and are not available for direct investment.

Risks to Consider: The value of investments in equity securities will fluctuate in response to general economic conditions and to changes in the prospects of particular companies and/or sectors in the economy. Investing in international securities generally poses greater risk than investing in domestic securities, including greater price fluctuations and higher transaction costs. Special risks are inherent in international investing, including those related to currency fluctuations and foreign, political, and economic events. While growth stocks are subject to the daily ups and downs of the stock market, their long-term potential as well as their volatility can be substantial. Value investing involves the risk that the market may not recognize that securities are undervalued and may not appreciate as anticipated. No investing strategy can overcome all market volatility or guarantee future results.

The opinions in the preceding commentary are as of the date of publication and subject to change based on subsequent developments and may not reflect the views of the firm as a whole. This material is not intended to be relied upon as a forecast or research or investment advice regarding a particular investment or the markets in general, nor is it intended to predict or depict performance of any investment. This material is being provided as general information only and is not intended to be legal or tax advice. Investors should not assume that investments in the securities or sectors described were or will be profitable. This document is prepared based on information Lord Abbett deems reliable; however, Lord Abbett does not warrant the accuracy or completeness of the information. Investors should consult with a financial advisor before making an investment decision.