ACG Insights: Understanding Active Share

Introduction

Over the last decade, the increase in asset flows to passive investment products has been staggering, so much so that during 2019, financial market witnessed the total assets in passively managed equity Funds surpass their active counterpoints. As such, the merits of active management continue to be a hot topic for debate across industry pundits. Those who favor indexing, pointing to the underperformance of active managers, typically categorize all active strategies together without digging in to the degree of active management for a strategy.

In 2006 two finance professors at the Yale School of Management, Martijn Cremers and Antti Petajisto, introduced a new portfolio measurement they called 'Active Share'. Active Share measures the percentage of portfolio holdings that differs from the benchmark. In other words, Active Shares informs investors to the degree a strategy is selecting stocks outside of its benchmark or weighting benchmark names significantly differently than the index. For their study, Cremers and Petajisto examined over 2600 funds from 1980 - 2003 and discovered a positive correlation between a fund's measure of active share and that fund's performance relative to their benchmark. Funds with the highest active share on average outperformed their benchmarks net of fees. When Cremers and Petajisto published "How Active is you Fund Manager" in 2009, they argued that Active Share could be used to predict the future performance of a mutual fund. But does it?

How is Active Share Calculated?

Active Share is calculated by taking the sum of the absolute value of the difference in weightings for each holding in a portfolio and the portfolio's benchmark and then dividing the total difference by two. As shown in Exhibit 1, the Active Share for this example portfolio would be 85%. An Active Share of 0% says that a portfolio's holdings are identical to it's benchmark while a portfolio with zero overlap with an index would have an Active Share of 100%.

Exhibit 1: How is Active Share Calculated?

	Weight in Portfolio (%)	Weight in Index (%)	Absolute Value of Difference (%)
Security A	0	20	20
Security B	0	20	20
Security C	5	20	15
Security D	5	20	15
Security E	5	20	15
Security F	25	0	25
Security G	20	0	20
Security H	15	0	15
Security I	15	0	15
Security J	10	0	10
Total	**100**	**100**	**170**

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What Does Active Share Tell Us?

Active Share provides a snapshot of a portfolio's holdings over any given point in time. While portfolio holdings can change, typically the management style does not and "Active Share this year is a very good predictor of Active Share next year and thereafter." (Cremers and Petajisto 2009). As a result, Active Share can be helpful in identifying Closet Index Funds – strategies claiming to be actively managed, but whose portfolio holdings are very similar in name and weight to their benchmark. Cremers and Petajisto categorized the degree of active management in three groups; Truly Active, Closet Indexers and Pure Indexing.

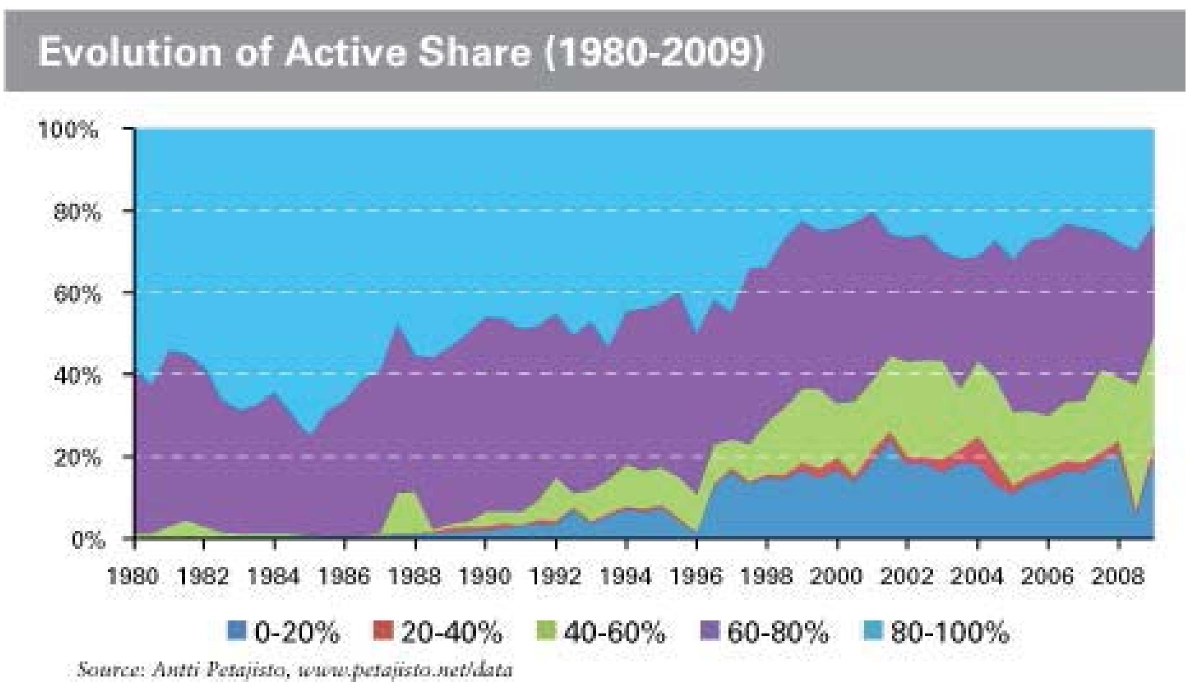
Exhibit 2: Degrees of Fund Management

Active share	Definition
0 – 20%	Pure indexing
40 – 60%	Closet indexers
80 – 100%	Truly active

Source: M.Cremers and A. Petajisto, "How Active is Your Fund Manager?" Yale School of Management, 2006.

The 2006 Yale study by Cremens and Petajisto revealed a rise in strategies defined as Closet Indexers. In 1980, the market share of strategies with Active Share under 60% was less than 2% while that figure jumped to roughly 50% by 2009. Conversely, strategies defined as Truly Active accounted for roughly 20% of market share in 2009, down from over 98% in 1980.

Exhibit 3: Active Share over Time

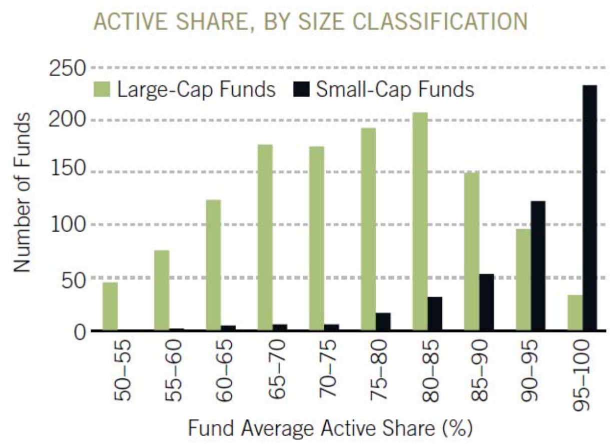


Identifying closet indexers is extremely helpful for investors as it gives them the ability to identify strategies that may offer little differentiation from low cost index funds, but with much higher fees. On the other hand, as the popularity of passive investing continues to rise, active managers have the ability to point to Active Share as a way to justify their fees.

Limitations of Active Share

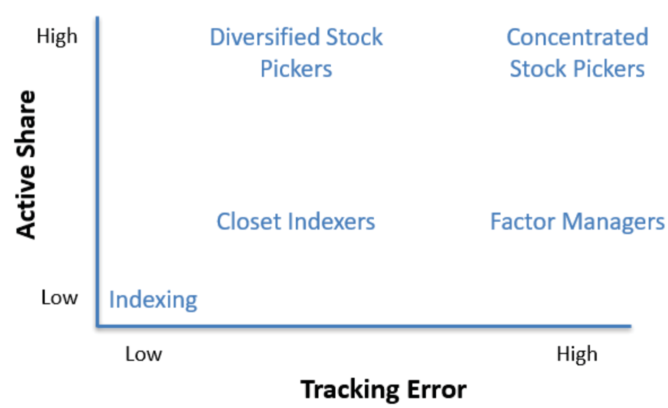
The biggest criticism for Active Share is that the calculation is less meaningful for strategies benchmarked to broad based indexes. For example, a Small Cap strategy with 100 holdings will have a much higher active share than a Large Cap strategy with 100 holdings simply because the Russell 2000 Index's universe is roughly 4x that of the S&P 500. Mid Cap, Small Cap and International strategies will naturally have a higher Active Share as compared to Large Cap strategies, all things equal.

Exhibit 4: Active Share by Market Cap[1]



Another limitation of Active Share is that the measurement focuses on active stock selection. Active Share is unable to take in to consideration other portfolio construction techniques such as sector rotation or factor driven investing which have their own benefits. Historically, investors utilized Tracking Error, a metric quantifying the difference in returns between a strategy and its benchmark, to measure the active risk in a portfolio. Tracking Error's output can change over time as the measurement is based on the historical return series of a strategy. Tracking Error can lead investors astray as high Tracking Error doesn't always equate to a high degree of active management. This statistic can be a more useful tool in identifying strategies that take large factor bets since Tracking Error doesn't consider the underlying holdings of the portfolio. When used in conjunction with each other, Active Share and Tracking Error can provide investors with a foundational understanding of the management style and degree of active management for a Mutual Fund.

Exhibit 5: Various Management Styles[2]



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[1] Source: M. Cremers and A. Petajisto, "How Active is Your Fund Manager" 2006
[2] Source: M. Cremers and A. Petajisto, "How Active is Your Fund Manager" 2006

Since the introduction of Active Share in 2006, numerous studies have been done concluding that the metric is not an effective tool to identify managers who will outperform. Recent data suggests that strategies with high Active Share are likely to be among the best AND worst performers in an asset class. Despite these findings, the concept of active share is still a widely accepted and utilized tool by many due to its simplicity - the only way for a strategy to outperform an index is to look and be different than the index. But, while differentiation is important to produce different returns from an index, it doesn't necessarily translate to producing benchmark beating results.

Conclusion

Investors today face a tough dilemma when deciding to invest between active and passive strategies. For those that choose active management, it is paramount to understand the degree of active management within a strategy to ensure that you are not overpaying for a strategy that does little to distinguish themselves from a low cost index fund.

When evaluating an investment strategy, a seemingly endless list of quantitative measures exist. From Alpha and Beta to Standard Deviation and Sharpe Ratio, each metric provides investors with unique information about a strategy. Interpreting the relationship between the countless number of portfolio statistics can overwhelm any allocator easily resulting in "analysis paralysis". While Active Share cannot be used to predict future results of a strategy, it is still a very useful metric. As the creator of Active Share Martin Cremers put it, "I think of active share as a very basic diagnostic tool…At a basic level, it tells you about a fund's holdings relative to its benchmark — it tells you what you're paying for". We are Atlanta Consulting Group would be happy to discuss how we utilize Active Share and other quantitative metrics as part of our rigorous manager selection process.