

HEALTH WEALTH CAREER

# ASSESSING THE ACTIVE SHARE CONCEPT



MAKE TOMORROW, TODAY



## EXECUTIVE SUMMARY

**Active share** is useful in assessing whether an active manager has positioned a strategy for the potential to exceed the benchmark and is represented by the proportion of an investment manager's holdings that differ from those in the benchmark. Active share can prevent investors from inadvertently paying active management fees for a strategy that more closely resembles the benchmark. Mercer has analyzed this measure for several years and we continue to believe, over the long term, that including managers with high active share in the overall portfolio could provide an attractive risk-return trade-off, especially for clients putting together unconstrained mandates.

## WHAT IS ACTIVE SHARE?

Active share demonstrates how much a manager's holdings vary from those in the benchmark. Managers that employ an active share mindset intentionally attempt to have different exposures than their reference benchmark. Active share depends on the absolute differences in portfolio weights for all stocks in the managed fund versus its index benchmark — that is, the manager's overweights and underweights. It can also be achieved by purchasing non-benchmark securities.

For a strategy that does not short stocks and does not purchase stock on margin, active share will always be between 0% and 100%. In contrast, the active share of a hedge fund strategy can exceed 100% due to its use of leverage and short positions.

## HOW IS ACTIVE SHARE CALCULATED AND WHY IS IT USEFUL?

Active share is calculated by totaling the absolute value of the differences between the weight of each position in the portfolio and the weight of each holding in the benchmark and dividing by two.

For example, the calculations below are based on portfolios with four and five holdings, respectively, and four holdings in the benchmark.

Manager #1 contains three securities in vastly different weights than the benchmark and one holding not in the benchmark, whereas Manager #2 contains all four index holdings in similar benchmark weights and one additional holding; as such, Manager #1 has a much higher active share than Manager #2.

Figure 1

MANAGER #1			
STOCK	PORTFOLIO #1	BENCHMARK	DIFFERENCE
Company #1	36	5	31
Company #2	14	50	36
Company #3	32	5	27
Company #4	18	0	18
Company #5	0	40	40
	100	100	152
		<b>Active share</b>	<b>76</b>

MANAGER #2			
STOCK	PORTFOLIO #1	BENCHMARK	DIFFERENCE
Company #1	10	5	5
Company #2	45	50	5
Company #3	4	5	1
Company #4	5	0	5
Company #5	36	40	4
	100	100	20
		<b>Active share</b>	<b>10</b>

If active management is employed, we suggest confirming that the portfolio is actually actively managed.

There is no universal active share number above which we consider a strategy truly active. The threshold depends on the breadth of the underlying index. Active share therefore receives greater attention among large-cap strategies for which the index is more concentrated, and larger index names have more influence on returns. In the small-cap arena, many managers commonly have a meaningful active share given that the index comprises 2,000+ stocks and active portfolios often contain only 50 to 200 securities. Overall, it is more meaningful for an active large-cap manager to maintain a significant underweight position versus the benchmark. Conversely, it is more meaningful for a small-cap manager to maintain an overweight position given the relatively small sizes of the many stocks in the universe. Note that for both large- and small-cap managers, maintaining an out-of-benchmark name can be significant.

The intuition behind active share is that an active manager must construct a portfolio that differs from the benchmark to then generate performance that differs from the benchmark.

## HISTORY

Although practitioners undoubtedly have used similar measures for decades, active share was formalized by Martijn Cremers and Antti Petajisto in 2006.<sup>1</sup> They concluded that strategies with high active share, smaller assets under management, and strong trailing one-year performance could deliver the greatest level of outperformance going forward.

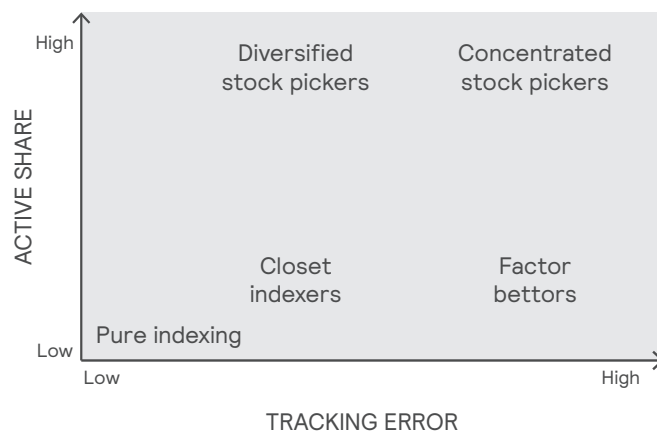
<sup>1</sup> Cremers M, Petajisto A. *How Active is Your Fund Manager? A New Measure that Predicts Performance*, 2006 (updated 2009 and 2010).

Recent published research by Frazzini, Friedman, and Pomorsik at AQR<sup>2</sup> – based on the same data set used in the original research in 2006 – found that active share is a weak performance predictor and entirely driven by strong correlation between active share and the benchmark type.

## ACTIVE SHARE VERSUS TRACKING ERROR

Ex-post tracking error is the standard deviation of the return differential between a portfolio and the benchmark. It is calculated using historical returns over a specified period. Active share is calculated based on actual portfolio holdings (not returns) as of a specific point in time (not over time). Although active share and tracking error are positively correlated, it is possible for low-tracking-error managers to maintain a high active share. In general, whereas diversified stock pickers would mostly be thought of as displaying lower levels of tracking error, those managers with varied sector exposures but similar stock weights versus the benchmark will likely display higher tracking error but lower active share (i.e., managers with strong factor exposure). As such, it is important to look at both active share and tracking error in concert with one another, as well as the underlying drivers of a manager's active share.

Figure 2



Source: Mercer

In looking at the graph above to categorize managers on an active-passive basis, we can identify managers that have a greater chance of outperforming (or underperforming) a given benchmark as depicted by diversified stock pickers and concentrated stock pickers. We believe this information is useful for ensuring that investors are not inadvertently paying active management fees for a strategy that more closely resembles the benchmark.

<sup>2</sup> Frazzini A, Friedman J, Pomorski L. "Deactivating Active Share," AQR, 2015.

## MERCER RESEARCH

Mercer research focuses its attention on firms that we believe have above-average expectations to outperform over a market cycle based upon our four-factor qualitative framework. The four-factor framework focuses on (1) idea generation, (2) portfolio construction, (3) implementation/risk management, and (4) business management. As part of this rigorous process, we have analyzed active share for several years in our assessments of strategies. The firms that receive our highest rating (an A rating) often have a high active share.

For example, when reviewing the current list of A-rated managers within the active large-cap US equity space, the median active share is 76% for broadly diversified portfolios and 88% for concentrated stock pickers. Not surprisingly, the concentrated stock pickers mostly also receive a tracking error “T” designation, signifying that the portfolio may experience heightened tracking error versus its benchmark. However, we believe these managers provide investors with a great probability of outperformance on a relative basis over the long term.

Our research also focuses on potential deterioration in active share as a result of an increase in the investment strategy’s assets under management (AUM). Studies suggest that managers with substantial AUM tend to drift toward closet indexing so discretion may be warranted when A-rated managers see asset growth. Overall, our top-rated managers have been able to consistently maintain a high active share. As part of our due diligence process, we assess a firm’s AUM to determine if asset growth leads to a change in the underlying portfolio. The argument against closet indexing is largely based on fees relative to performance.

Our top-rated managers have been able to consistently maintain a high active share.

Figure 3

### MERCER US EQUITY UNIVERSE

CATEGORY	GIMD UNIVERSE	MERCER A-RATED UNIVERSE		
	Median	Median	High	Low
Large-cap core	75	84	92	41
Large-cap growth	83	84	93	72
Large-cap value	79	81	90	71
SMID cap core	95	95	98	89
SMID cap growth	94	93	99	88
SMID cap value	96	92	98	82

Inexpensive index strategies can be used to build out the core broad market exposure, whereas higher active share satellite managers offer the potential for increased alpha.

## PORTFOLIO CONSTRUCTION APPLICATION

Active share can also be very useful for clients in putting together unconstrained mandates or implementing a core-satellite portfolio of managers. Inexpensive index strategies can be used to build out the core broad market exposure, whereas higher active share satellite managers offer the potential for increased alpha. Although these individual portfolios may experience increased volatility on their own, when paired correctly, the resulting total portfolio provides investors with a compelling risk-return trade-off.

As depicted in Figure 3, the median active share for our A-rated managers is typically higher than for managers in our broad universe. Additionally, and not surprisingly, the median active share for our A-rated small-cap managers is higher than for our A-rated large-cap managers given the ability for small-cap managers to look very different from the benchmark, owing to the size of the opportunity set.

## CONCLUSION

Active share provides a simple way to identify managers who are truly active in their stock selection and have an opportunity to outperform. Additionally, if active share and tracking error correctly capture and measure the two active-passive dimensions, using both active risk measures provides information to not only better identify and understand a manager's potential ability to outperform a given benchmark but also create a core-satellite portfolio and/or allocate to unconstrained portfolios.

If active management is employed, investing in high-quality strategies with high active share is attractive. High active share is not a predictor, but a condition of manager outperformance. The quality of management is, of course, still important because a manager can be positioned as a diversified stock picker but not be able to execute. Rather than utilizing closet indexing strategies, it may be better to employ high active share managers in conjunction with a pure indexed allocation (if risk mitigation is desired).

## **ABOUT THE EQUITY STRATEGIC RESEARCH TEAM**

Mercer's Equity Strategic Research Team (SRT) comprises primarily field consultants from Mercer's Investments business and members of Mercer's Equity Research Boutique. The SRT seeks to provide a client-facing perspective on research, new ideas, and intellectual capital, and to serve as a resource for questions regarding this asset class and related consulting processes.

## **ABOUT THE AUTHORS**

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