



Are Active Managers Active Enough?

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In this highly volatile market tracking a portfolio's benchmark is sometimes comforting for money managers; however, a recent study details a new concept of portfolio management that throws this contention into doubt.

Long-only equity portfolio management tends to be generalized into two investing camps, passive management and active management. Passive investing includes index funds, which are designed to match a specific benchmark return. Active investing, including both fundamental and quantitative portfolios, is designed to outperform a stated benchmark. This outperformance, referred to as the fund's "alpha," depends in large part on the level of risk the portfolio targets. Portfolio risk is often measured in terms of "tracking error" (TE), which is the volatility of the differences between the fund's return and the benchmark's return.

The higher the tracking error, the more risk the fund is taking to achieve alpha. In recent years, two academics from the Yale School of Management's International Center for Finance, Martijn Cremers and Antti Petajisto*, created a new risk measure, something they termed "Active Share," in order to go along with tracking error as a means to identify the amount of risk that a given portfolio was taking. Their study examined the relationship between tracking error and active share and their results showed that a portfolio's active share could be used to predict its future performance.

Active Share (AS) is defined as the sum of the differences for each portfolio position weight vs. its benchmark weight. That is, the non-overlap between a portfolio and its benchmark. For example, if a portfolio owns 3% of Microsoft and its benchmark weight is 2%, then it is counted as 1% toward the total active share amount. Assuming no shorting, then AS should be between 0% and 100%. A perfectly replicated index fund would have a 0% AS. An active portfolio with 35% AS will have 35% overweights (and 35% underweights to balance it out), with the other 65% matching the benchmark. Consequently, the higher the active share, the further the portfolio is from the benchmark, and the more "risk" it is taking. Now let's look at active share combined with tracking error along a two dimensional table.

Two dimensions of active management risk

Active Share	High	Diversified Stock Pickers	Concentrated Stock Pickers
	Low	Closet Indexing Pure Index	Factor Bets
		Low	High
		Tracking Error	

The authors of the study define high active share as 60% or more and high tracking error as 6% or more. Furthermore, they classify the type of funds which exist in each category. The first category includes funds that have low TE and low AS. These are classified as "closet indexers" because they tend to hug the benchmark. The authors put many so-called "actively" managed funds in this category. I would put enhanced indexing in this category although clients want risk controls in those funds. At the extreme version of this category are index funds with virtually zero tracking error and zero active share.

The second category is funds that have high TE but low AS. These are referred to as "Factor Bets" because they typically include sector rotating funds or funds that have a top-down approach. In these funds, you would match up on stocks in the benchmark sector and then overweight or underweight the sector. The third category is low TE and high AS. These funds are known as "Diversified Stock Pickers" because their position bets are spread out among benchmark and non-benchmark names, but tracking error is somewhat contained. Many pure stock picking funds or even active/quantitative funds would exist inside this category. Finally, the last category is high TE and high AS. These funds are known as "Concentrated Stock Pickers" because they have less stocks and bigger positions in the names that the manager favors.

The authors analyzed all U.S. mutual fund performance from 1990 through 2003. They found that active portfolios that had higher active share performed better than those with lower active share. Moreover, those funds with higher TE and higher AS, so-called "Concentrated Stock Pickers," performed the best. The excess return spread (high-low AS) for high TE funds over that period was over 4% annualized and was statistically significant. In fact, the more concentrated the portfolio over all, the better the performance. The next best portfolios were diversified stock pickers, which also had high AS at lower levels of TE. In fact, the excess return spread for high-low active share even at the lowest tracking error quintile was still positive, 1.8%. The authors' conclusions were pretty simple: High Active Share predicts higher excess returns. Therefore, to generate long-term alpha in the long-only equity mutual fund space, you must be willing to take higher active risk (via high AS).

On the flip side, excess return spreads for high-low TE were negative when active share was low. This shows that hugging the index and taking factor bets are not the best ways to produce maximum alpha. Indeed, one of the interesting points the authors make is that prior to the 1980s and the advent of indexing, funds were actually better diversified and more concentrated because they were relatively benchmark unaware. The trend since the 1980s has been toward lower Active Share. In a sense, this is the gap that hedge funds and highly concentrated funds have begun to fill during the past 15-20 years. Either way, the authors demonstrate something most portfolio managers intuitively feel: We should be taking bigger positions in our (or our model's) best stock picks.

* Cremers and Petajisto, "How Active is Your Fund Manager? A New Measure that Predicts Performance," Yale School of Management, August 7, 2006.