

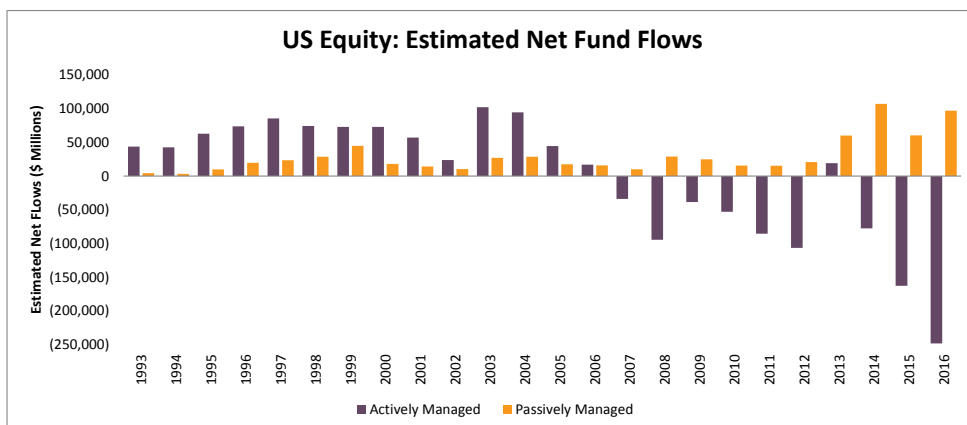


Carolyn Butterworth, Senior Analyst, Research

Lifting the Veil off Active and Passive Investing

BY CAROLYN BUTTERWORTH, SENIOR ANALYST, RESEARCH

The debate on the merits of active and passive (a.k.a. index) equity performance has certainly become a contentious one, and if the direction of fund flows is any indication, then passive seems to be winning. The chart below compares the estimated net fund flows in and out of active and passive US equity products over the years.



Source: Morningstar, data as of 12/31/2016

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Active proponents claim that managers can exploit market inefficiencies to generate excess return (i.e. investment returns from a security that exceed a particular benchmark or index); while passive enthusiasts forego the temptation to outperform indexes in exchange for lower fees. Numerous studies have already been conducted in order to determine the winner in this match, but the purpose of this particular study is to view the debate within the lens of the Hartland Research team's philosophy.

What is the difference between Active and Passive investing?

The central idea is that active investing is driven by portfolio manager(s) investing in targeted areas of the market with the belief that their holdings will provide greater returns than the benchmark. Though the methods of active investing run the gamut from black-box quantitative investing to top-down fundamental methodologies, the commonality between them is the goal of outperforming the index, thus justifying the usually higher fee paid by investors. At the other end of the investing ideology spectrum, passive investors reject the notion of paying experts to attempt to outperform the market and instead pay a lower fee for a product designed to mimic an index.

How is Hartland's analysis different from the Active vs. Passive studies already conducted by other institutions?

The major difference between our analysis and the numerous studies that have already been published is that Hartland is not accepting the industry standard for active management at face value. The Morningstar-defined equity categories are commonly used in the industry to represent groups of active management according to style. For example, active managers investing in large, US-based companies can be found in the Morningstar US Large Blend, Growth or Value categories. It is a useful tool for evaluating a manager's performance against their peers, but issues emerge when delving deeper into the underlying strategies. The most blatant example is that passive funds are included in these categories. Passive products by design should underperform (on a net of fee basis) the indices they are constructed to follow simply because they are not free. Though fees are low, investors must still pay to participate in the market which, causes a drag on performance compared to the index (though there are exceptions with passive products that do not closely track their benchmark). Of course, Hartland does not consider passive mutual funds to be active investments, so removing them from each category, or universe, improves the accuracy of our results.

A few other adjustments made to the Morningstar-defined universes include removing multiple share classes, adding back obsolete funds and cutting out the most expensive strategies in each group. The standard Morningstar categories include every available share class for each strategy, which leads to redundancies. We narrow the universe to focus only on the institutional share class that has lower fees than their retail counterparts and is used more frequently by our clients. Obsolete funds (strategies that have closed due to poor performance, issues at the parent company level, mismanagement, etc.) are added back into the universe with the intention of avoiding survivorship bias. By looking into historical data, but only reviewing the strategies that are available today, skews the data in favor of better performing strategies that have not been shuttered. The purpose of this analysis is to create a more accurate understanding of active management over time which must include all funds that had been in the marketplace over the years.

The final major difference between Hartland's study and others is that we remove the highest fee strategies by eliminating the 25% most expensive funds in each category. When our Research team undergoes a search process for a new manager, the most expensive strategies are generally not considered to be the best investments for our clients. A manager that charges an expensive fee is setting the bar extremely high considering the goal is to outperform the benchmark after fees. Hartland evaluates performance on a net of fee basis, so if an active manager generates outperformance, but it is completely wiped out by a high fee, then we are back at square one.

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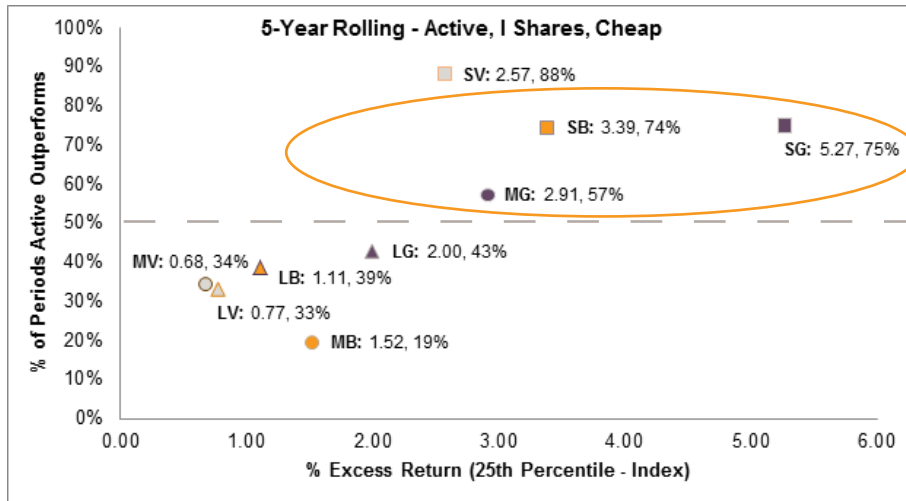


The chart above illustrates the steps taken to filter through the Morningstar-defined categories into universes that are better-aligned with Hartland's philosophy of manager evaluation.

Once the new categories have been defined, how is historical performance evaluated?

From a high level, the performance is tested by how often active outperforms passive, and by how much excess return is generated by the top performers. It is essential to look at performance from both angles because we may see that passive outperforms active the majority of the time, but the excess return created by active justifies the risk the investor is taking. Alternatively, we may observe active outperforming the majority of the time but a very low excess return may deter investors from taking that risk. The commonality between the universes is that there must be at least thirty strategies for the performance data to be statistically robust. The earliest data available for some of the universes may only include the performance of a handful of strategies (sometimes only one) which leads to skewed distribution of results.

The charts below display the results of the US equity categories on a five year rolling basis:



Abbreviation	Category Name	Comparative Index	Time Period
LB	Large Blend	S&P 500	11/01/1984-7/31/2016
LG	Large Growth	Russell 1000 Growth	11/01/1983-7/31/2016
LV	Large Value	Russell 1000 Value	1/01/1987-7/31/2016
MB	Mid Blend	Russell Midcap	10/01/1998-7/31/2016
MG	Mid Growth	Russell Midcap Growth	3/01/1992-7/31/2016
MV	Mid Value	Russell Midcap Value	4/01/2001-7/31/2016
SB	Small Blend	Russell 2000	2/01/1994-7/31/2016
SG	Small Growth	Russell 2000 Growth	5/01/1992-7/31/2016
SV	Small Value	Russell 2000 Value	7/01/1998-7/31/2016

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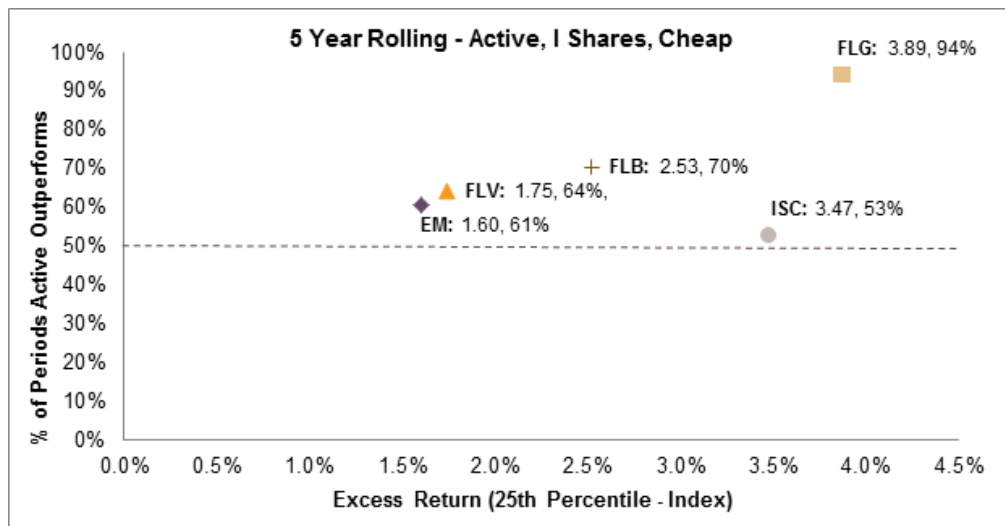
The data shown on the X and Y axes show two different measurements of performance:

- Y-Axis (% of Periods Active Outperforms) = the percentage of time the median active manager ranks better than the index. We are using the filtered universes of only active, institutional share class and cheaper funds.¹
- X-Axis (% Excess Return) = the spread between the top quartile manager performance and the index. We want to understand to what degree returns are outperforming the index by the top managers.

The performance data shown represents past performance. Past performance is not indicative of future results. Actual performance may be lower or higher than the performance data presented. This is for informational purposes only and should not be considered as investment advice or a recommendation. The active manager's classification and representative time periods are determined by Morningstar and screened by Hartland. The intent of the analysis is to demonstrate that some asset classes have a greater percentage of active managers that have historically outperformed their benchmark, based on historical performance and Hartland's filters.

The vertical axis illustrates the percentage of time the median active manager has beaten passive (represented by the appropriate index), indicating the categories above the dotted line (Small Cap Value, Small Cap Blend, Small Cap Growth & Mid Cap Growth) have beaten the index the majority of the time. The horizontal axis is a measure of excess return expressed as the difference between the performance of the top quartile performer and the designated index for each category. Data points farther to the right side of the chart signal higher excess return generation. As expected, active management in US small cap categories and mid cap growth show the strongest history of outperformance. For example, the median active manager in US Small Cap Growth has outperformed 75% of the time (between May 1992 and July 2016); the top quartile manager has added 5.27% of excess return. The US large cap categories outperform the index less frequently than their small cap counterparts, but the top quartile active managers still generated positive excess returns.

The next chart illustrates Hartland's results of the Non-US equity categories using the same methodology. It is immediately evident that active management in all of the international universes have outperformed their respective indexes the majority of the time. Foreign Large Growth stands out as the strongest leader in active management with the median manager outperforming 94% of the time and the top quartile manager adding 3.89% of excess return. Emerging Markets have proven to be a difficult market for active management to excel, possibly due to the higher levels of volatility that may test managers' dedication to their stock picks or macro events driving returns regardless of stock fundamentals.



Abbreviation	Category Name	Comparative Index	Time Period
FLB	Foreign Large Blend	MSCI EAFE (net)	09/01/1993-07/31/2016
FLG	Foreign Large Growth	MSCI EAFE Growth (net)	01/01/1997-07/31/2016
FLV	Foreign Large Value	MSCI EAFE Value (net)	11/01/1990 -07/31/2016
ISC	International Small Cap	MSCI ACWI ex USA Small Cap (net)	10/01/1996-07/31/2016

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Generally speaking, active management performance fared better compared to the index after filtering out strategies in each universe that did not adhere to Hartland's criteria of active management. By removing the low-hanging fruit like passive strategies disguised in the Morningstar-designated categories and the redundancies that come along with multiple share classes made for universes we believe better reflects the opportunities available in active management. By focusing on the performance of the cheaper active management strategies, Hartland's preference for lower-fee strategies can be more reasonably tested against passive funds.

The final results offer valuable insight into different ways active management can behave and helps dispel the idea that passive investments are appropriate for all investors and/or in all asset classes. Of course, this is just one of many inputs that should be considered when choosing investment opportunities. Deciding the appropriate trade-off between potential excess returns and the level of risk undertaken is a delicate balance that Hartland can help clients navigate.

Sources:

1 - Removed 25% most expensive

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MARKET BENCHMARK RETURNS

April 30, 2016		1M	3M	12M	YTD
US Large Cap	S&P 500	0.4%	14.7%	33.5%	0.4%
US Small Cap	Russell 2000	2.9%	4.3%	12.6%	2.9%
Developed Intl	MSCI EAFE	5.5%	0.9%	25.9%	5.5%
Emerging Intl	MSCI Em Mkt	0.2%	2.3%	13.5%	0.2%
Real Estate	NAREIT	0.2%	-2.0%	1.5%	0.2%
Core Fixed	BarCap Agg	0.2%	-0.2%	0.9%	0.2%
Short Fixed	BarCap 1-3Yr	0.3%	-4.9%	4.8%	0.3%
Long Fixed	BarCap 10+Yr	0.3%	-1.8%	5.4%	0.3%
Corp Debt	BarCap Corp	1.2%	4.6%	2.8%	5.2%

Source: Bloomberg

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