To Be or Not To Be…Active

Active versus Passive (index) Management

By Doug Leeson, Principal

There have been many research pieces written about the merits of active portfolio management versus passive, or index management. Active management represents the use of a human element to "actively" manage a fund's portfolio by incorporating analytical research, forecasts and personal judgment in making investment decisions on what securities to buy, hold, and sell. Active managers, using various strategies, attempt to beat the market benchmark using performance, risk, or a combination thereof, as the evaluation metric. Passive (index) management, on the other hand, simply tries to match market returns, usually employing a computerized strategy for buy/sell decisions, attempting to replicate performance and risk of the benchmark index.

Recently, there has been considerable interest in index funds due to their relatively low cost and market-matching returns. In fact, even Warren Buffet says that "a low-cost index fund is the most sensible equity investment for the great majority of investors". His view is premised on the reality that most investors lack the skill or time to adequately research and invest in individual stocks and bonds successfully over time.

With this in mind, we were interested in determining whether investment professionals, those that assess a fee for managing mutual funds on a full-time basis using an active approach, have demonstrated a consistent ability to outperform an index strategy. Our analysis included a review of actively-managed funds representing the following investment categories: Intermediate Core Bond, Large Cap Blend Stock, Mid Cap Blend Stock, Small Cap Blend Stock, Foreign Stock – Large Cap Blend. Our rationale for using the "Blend" style for the stock categories is that, by definition, the major market indices include both Growth and Value stocks and therefore, using a blend of the two seemed the most logical.

We focused on the following four evaluation metrics to assist us in drawing conclusions:

- Index fund performance ranking versus actively-managed fund peers
- Margin of outperformance/underperformance of actively-managed funds vs. index funds
- Median annual expense ratio of outperforming/underperforming actively-managed funds
- Median number of holdings of outperforming/underperforming funds

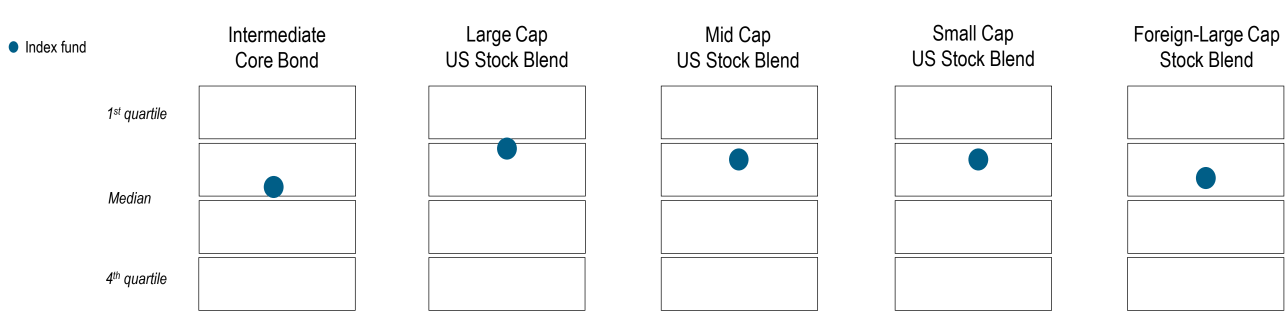
Our statistical data was provided by Morningstar and 995 funds were represented in the sample. Calendar years 2010-2019 were used for analytical purposes and all performance was calculated on a net basis, after the deduction of fund fees. Only institutional share classes of funds were included. Median values were used for data representing group measurements to minimize the impact of extreme outliers, both positive and negative.

Recognizing that investors cannot invest directly in indices, we used the following funds as index proxies for each respective investment category:

Intermediate Core Bond	Large Cap Stock Blend	Mid Cap Stock Blend	Small Cap Stock Blend	Foreign Large Stock Blend
Vanguard Total Bond Market Index I	Vanguard Institutional Index I	Vanguard Mid Cap Index I	Vanguard Small Cap Index I	Vanguard Total Int'l Stock Market Index I

Index Fund Performance Ranking

It is commonly understood that the more efficient an investment category, the more challenging it is to outperform the index. Efficiency can be defined as access to information about an investment and the ability to trade quickly and economically. The U.S. stock market is generally recognized as the most efficient in the world. Therefore, it stands to reason that outperforming the index in the U.S. stock categories can be quite difficult. This is evidenced by



	Intermediate Core Bond	Large Cap US Stock Blend	Mid Cap US Stock Blend	Small Cap US Stock Blend	Foreign-Large Cap Stock Blend
Index fund percentile rank	47th	26th	31st	31st	43rd
Number of peers	125	347	119	196	208

the performance ranking percentile of the Vanguard index funds in the U.S. stock categories as shown in the chart. With 26th, 31st, and 31st percentile rankings in the Large Cap, Mid Cap and Small Cap stock categories respectively, this suggests that over two-thirds of active managers underperform the index fund in these categories. However, inefficiencies can be observed in the Intermediate Core Bond and Foreign Large Cap categories as index fund performance ranks in the 47th and 43rd percentiles respectively. This means that approximately half of actively-managed funds are outperforming the index fund. Based on this information, the odds would appear to favor index funds for U.S. stocks over actively-managed funds based on performance rankings alone. For core bonds and foreign stocks, it seems to be a toss up.

Margin of Performance Difference

We then analyzed the degree of outperformance/underperformance of the actively-managed funds versus the index funds to determine if the margin was significant enough to warrant the risk of using actively-managed funds, particularly in the U.S. stock categories.

	Funds Outperforming % Difference*	Funds Underperforming % Difference*	Net Difference vs. Breakeven*
Intermediate Core Bond	+0.75%	-0.52%	+0.23%
Large Cap U.S. Stock	+1.59%	-1.75%	-0.16%
Mid Cap U.S. Stock	+2.19%	-3.17%	-0.98%
Small Cap U.S. Stock	+2.28%	-2.78%	-0.50%
Foreign Large Cap Stock	+2.53%	-1.95%	+0.58%

*Annualized

This analysis would again seem to favor using index funds for U.S. stocks given the negative net difference versus breakeven numbers but seems to swing the pendulum toward active management for bonds and foreign stocks.

Expenses

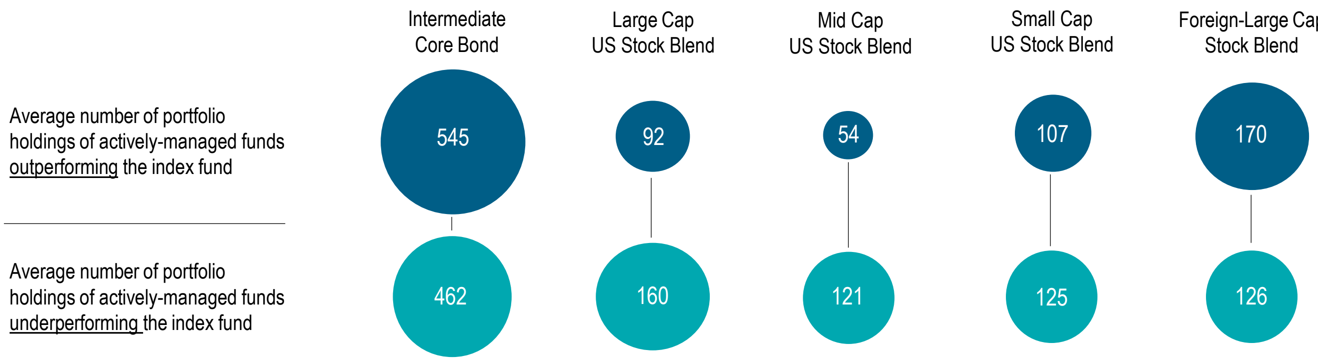
This was the area of the analysis that was most surprising. Intuitively, one would expect that the actively-managed funds outperforming the index funds would generally have lower fees than their underperforming counterparts. After all, a higher fund expense ratio represents a higher hurdle to overcome each year when comparative performance is measured on a net basis. Interestingly, the data does not support this assumption. Below, we compared the average annual expense ratios for actively-managed funds that outperform the index fund in each category versus those that underperform. The difference is negligible.

	Average Expense Ratio Outperforming Funds	Average Expense Ratio Underperforming Funds	Net Difference
Intermediate Core Bond	0.45%	0.46%	0.01%
Large Cap U.S. Stock	0.67%	0.66%	0.01%
Mid Cap U.S. Stock	0.84%	0.87%	0.03%
Small Cap U.S. Stock	0.94%	0.95%	0.01%
Foreign Large Cap Stock	0.84%	0.83%	0.01%

Number of Holdings

Mutual funds, by their very nature, are intended to be diversification vehicles. They represent a simple way for an investor to gain exposure to a multitude of stocks and bonds through a single security. Over the past several years, actively-managed mutual funds have been maintaining a larger number of securities in their portfolios. Theoretically, this represents greater diversification and potentially a reduction in risk – both positive outcomes for investors. However, as a mutual fund's holdings expand, there is the risk that it becomes "overdiversified" and performance starts to mirror that of an index fund. In light of the favorable performance comparisons of index funds versus actively-managed funds, particularly for U.S. stock funds, overdiversification may not be perceived negatively. The difference though is that an actively-managed fund has to overcome its expense ratio hurdle in order to outperform a comparable low-cost index fund on a net basis. Expense ratios for actively-managed funds are considerably higher than those for index funds. Therefore, if the fund is overdiversified and its portfolio holdings and characteristics mirror the index, the challenge to outperform the index fund on a net basis is significantly higher due to the higher expense. In essence, the investor is simply paying a higher fee for a "quasi-index" fund.

To test this theory of overdiversification, we analyzed the average number of individual holdings in each actively-managed fund that outperformed its category index fund and compared the result to the number of holdings in the actively-managed funds that underperformed.



Within the U.S. Stock categories, the data would suggest that smaller, more focused portfolios tend to outperform the index fund within a category. This is consistent with the notion that overdiversification can be penalizing from a performance perspective. So why might a fund choose to expand the number of holdings since it could result in performance that lags the index fund on a net basis? Perhaps it relates to an active manager's objective of not deviating too much from index returns out of concern over potential investor withdrawals, even if it results in slight underperformance. While a narrower portfolio can lead to short periods of meaningful underperformance and greater performance volatility, the data suggests that cumulative long-term performance favors this approach within the U.S. stock category.

Within the Core Bond and Foreign Stock categories, the data indicates that funds with a larger number of holdings tend to outperform. This could be a function of the extraneous, non-security specific variables that impact performance in these categories. For example, interest rate movements and currency fluctuation can be major contributors to performance in the Core Bond and Foreign Stock categories.

Conclusion

At IRA Group, we believe that there is a place for both active and passive management in a portfolio. Yes, the odds favor passive management – particularly in the U.S. stock category. However, with proper due diligence and supporting research, active management can and does add value from a performance and/or risk perspective.

In evaluating an actively-managed mutual fund, it is normal that investors have a tendency to focus on historical returns since this is believed to be a predictor of future performance. However, there is a reason that the "past performance does not predict future returns" disclaimer is included in most investment communications. While this information can be a useful tool within the context of overall research due diligence, it is not predictive in nature. More importantly, consideration should be given to the factors that are likely to influence future results. These factors are qualitative and quantitative in nature and include:

- Organization
- Portfolio management team
- Portfolio management tenure
- Research process
- Security selection process
- Portfolio holdings
- Risk parameters
- Fees & expenses

A thorough vetting of each of these variables which ultimately impact performance can lead to favorable future outcomes with the actively-managed portion of an investment portfolio.