Active Investing versus Index Investing:
An Evaluation of Investment Strategies

By

Daniel Rossouw Wessels

1. Conclusions

In general, the findings of the study corresponded with the theories and principles of active versus passive investing. Similar results were obtained than those studies done elsewhere in the world in which passive or index investing performed better than the average of active investing over time.

However, caution should be exercised in concluding that passive investing is the only viable investment strategy to follow. Many of the underlying assumptions in building such a theory could be wrong; there are comparative issues such as equally-weighted versus capitalisation-weighted measurements or lack of appropriate benchmarks that could skew performance comparisons. Further, the net outcome of such an analysis depends on the time frame used. Different conclusions can be reached by shifting the review period forward or backward.

Rather, an investor needs a balanced approach on the active versus passive investing debate. A fundamentalist approach regarding any one of the strategies is prone to be proven wrong. In developing such a balanced viewpoint it is necessary to reflect on the findings of the study. The conclusions that can be made from the study support such a stance in the active versus passive debate.

The study revealed that when upfront costs attached to active investing were ignored, active fund managers have beaten the index benchmark over the various measurement periods and methods used in the study. The average performance of active fund managers more than compensates for the ongoing fees applicable to manage active funds and delivered out-performance versus the index.

For example, if a cumulative performance measurement approach is used, the average of active funds beat the index in 60% of the 156 periods under review. In the random sampling study the average of active funds statistically outperformed the index over a five and ten year investment period at a 5% significance level, while a similar result manifested over a rolling ten year period.

However, when the upfront cost of active investing was included in the performance analysis a different conclusion to the above was made. Upfront costs have had a significant impact on the performance of actively managed funds, especially over the shorter investment periods.

Hence with the random sampling method index investing statistically outperformed the average of active funds (at a 5% significance level) over three and five year investment periods. Index investing also fared significantly better than the average of active funds over the rolling investment periods and active funds out-performed the index in only 30% of the cumulative performance periods.

An analysis of the risk-adjusted returns (Sharpe and Treynor) showed that the index significantly outperformed the average of active funds over rolling five and ten year periods, with no statistical significant difference (at a 5% level) over the three year periods.

In general it was found that the hypothesis that more than 50% of active funds will under-perform the index, holds and on average only 40% of active funds fared better than the index over rolling three, five and ten year periods respectively. Further, one can conclude that on average the active fund manager did not add significant value to fund performance by being different to the market risk profile. However, notable exceptions to the rule were identified.

Similar exceptions were identified when the consistency of fund performance was analysed. A few funds exhibited extraordinary persistence - either in out-performing or under-performing. In general it was found that over the short term (month-to-month and quarter-to-quarter basis) there was a tendency that the current performance

of a fund would be repeated, with especially a greater tendency among the top performing funds to remain a top performer.

However, when the consistency of fund performance was measured on a year-to-year basis, less consistency among funds was identified. The decile ranking movement of a fund - upwards, downwards or sideways - became more random in nature. When the forward-looking period was extended to three years, however, the chances that the fund would have stayed in the same decile became very slim.

Herein lies the danger of placing your trust with one active manager only; over the long run the performance ranking of managers can assume a random nature if manager skill is not persistent.

When comparing the index performance with the percentile rankings of the active funds one could place the index at about the 60th percentile over the three different rolling periods, which in itself is an "above-average" performance. When viewed on a return/risk level only the minority of active funds contributed any alpha or positive information ratios. By ranking active funds according to their information ratios, value was found only from the 70th percentile onwards, highlighting the thin edge active management treads on to beat the market over time.

Consequently index investing could arguably be considered as a sound investment strategy where a perceived average return is turned into above-average when compared with that of active investing.

Index investing normally implies a diversified investment approach; however, in a South African context it is not necessarily valid due to market concentration where the mining and resources sector on its own make up 45% of the market. Active unit trust funds on the other, normally assume a much more diversified and equally-weighted profile than the market on its own.

The study revealed that index investing indeed yielded volatile returns to investors, but, more importantly, over time index investing and active management alternated

one another as the dominant investment strategy. Therefore, index investing at least in the South African context might not be a solution as a standalone strategy, but should rather be combined with active investing strategies. Hereby the overall volatility of portfolio return is reduced over time, which ultimately leads to higher reward per unit risk ratios.

Nonetheless, concluding that active and passive investing strategies should be combined in investment portfolios to yield higher reward-to-risk ratios is a relatively straight forward conclusion, but to know what level of index investing to use or which active managers to select is a different challenge altogether.

2. Recommendations for Implementing Investment Strategies

Combining Strategies

The extent to which index investing (including enhanced index funds) should be used in an investment portfolio depends on one's perceptions or expectations of active management's performance. For example, from the study it was shown that when the performance contribution of active management was expected to be in the top quartile of investment returns that at least a 30% exposure to passive investing would be a prudent strategy.

Further, when different combinations of index investing with top quartile active fund performance were backtested over various rolling periods the results indicated that the allocation of index investing in the combined portfolio should increase the longer the investment horizon, in general confirming the belief that over the long run it is difficult for active managers to beat the market.

Selecting Active Managers

No infallible method exists to identify those active managers in advance that will substantially outperform the index. One possible alternative would have been to

evaluate the past performances of active managers over time whereby the consistency of a fund manager or company can be evaluated against complete randomness that would have prevailed if no manager skills were present.

Probably more important is to gather information from active managers in terms of their investment philosophies, processes and styles to form an opinion about the capabilities of the manager to deliver out-performance over time.

Furthermore, selection of active managers should focus on those managers that do not necessarily replicate the market closely and whose portfolios could deviate substantially from the index. Hereby a costly duplication of the index strategy is prevented and fees are rather paid for managers' skills to identify stocks that offer exceptional value going forward. For example, investment styles such as value investing or small capitalisation styles could be combined with index investing.