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What you see now is not what you will get. Can investors trust investment advisors when they recommend funds on the basis of past performance?

By DANIEL WESSELS and NIEL KRIGE

The fund performance illusion

Research conducted at the University of Stellenbosch Business School into the long-term performance of equity fund managers found that past performance was not a reliable indicator of future performance. The study links up with the trends revealed by previous international and local studies and found relative persistence in yields in the short term, but short-term results did not have long-term predictive value. The longer the investigation period, the more the performances would adopt a random up-and-down movement.

The clear message from the research is a warning to investors. Do not put your trust in one active manager only. In the long run, a particular fund's performance may deviate substantially from its recent track record. The study thus exposes the danger of accepting current performance as the sole predictor of future performance and suggests, especially for longer-term investments, that investors must become better acquainted with the investment philosophies and decision strategies of fund managers before making investments.

What was interesting, contrary to the overall patterns, was that a few top-performing funds were found to be persistent. They maintained their positions in the top ranks for extended periods and beat the JSE All Share Index (ALSI) on a consistent basis. The case was similar at the other end with a few under-performers showing a determined persistence in filling the bottom positions. The funds in between demonstrated a wide dispersion of movements up and down the performance rankings.

The ALSI Index also fared better than the majority of funds. Over the various investment periods studied, the performance ranking of the index counted, on average, among the top 40% of funds. Yet, its performance from period to period varied considerably.

The investment crystal ball

It is common practice among professional investment advisors to devote

their time to studying the performance of mutual funds in the belief that they can conjure up the future winners based on historic performance.

However, questions have been asked over the years about the consistency of fund performance and whether past performance can be interpreted as a reliable indicator of future performance. The relevant principle underlying such questions, of course, is the efficient market hypothesis which implies, inter alia, that past performance of stocks on the stock market is no guarantee of future performance. In other words, investors will not be able to beat passive investment strategies, and top-performing investors will not necessarily repeat their performance in the future. These notions have regularly attracted the attention of researchers in the unit trust industry and led to numerous studies to investigate whether certain active fund managers have the ability to perform consistently better than others.

Based on published evidence (see box below), investors may rightfully ask: Should we trust investment advisors when they select funds mainly because of their recent performance?

Unravelling newer evidence

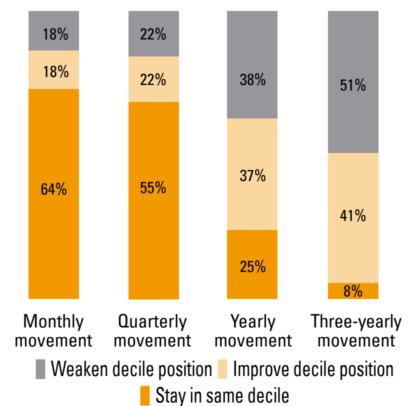
Building on what past studies have suggested – particularly the findings of the South African market – this study set out to investigate the medium-term persistence of fund managers in the South African Unit Trust Industry between 1988 and 2003 in relation to the index benchmark (ALSI). The research used unit price data from McGregor's Raid Station database to record the past performance of active fund managers in South Africa. The performance of actively managed funds in each period was ranked and the consistency of funds in keeping their rankings in subsequent periods could be checked. Further, the tendency of funds to repeat their relative performance over different longer forward-looking periods could be determined. The analysis used the 'after-cost' performance data over rolling three-, five- and ten-year investment periods.

One part of the research examined the track records of funds over different successive periods: monthly, quarterly, yearly and three-yearly. The funds were grouped in performance **deciles** and the relative movement of funds between deciles were recorded over the different periods. By interpreting the patterns of movement, this analysis gave an indication of the probability that a particular performance would be repeated in future successive periods.

First, an analysis was done on all funds combined. The graph (Movement between deciles: all funds) illustrates the probabilities of movement over the different intervals studied. Three alternatives of movement were considered: stay in the same decile (maintain its performance); move to a higher decile (improve its ranking); or move to a lower decile (weaken its ranking).

The statistical convention of **percentiles** was used for performance ranking in the study. For example, a 25th percentile performance is the value on a scale above 25% of the observations and below 75% of the observations (i.e. the bottom **quartile**). Similarly, a 75th percentile performance (or the top quartile) is the value that corresponds to where 25% of the observations lie above and 75% below. **Deciles** are 10th percentile steps and are ranked from 1 to 10; the first decile is the bottom-ranked and the tenth decile is the top-ranked decile.

Movement between deciles
ALL FUNDS



The average probability of funds to repeat their performance (stay in the same decile) in successive months was 64%. In comparison, the probability of funds to repeat their performance in successive quarters declined to 55%. This probability further declined to 25% on a year-to-year basis; and to only 8% on a three-year forward-looking basis.

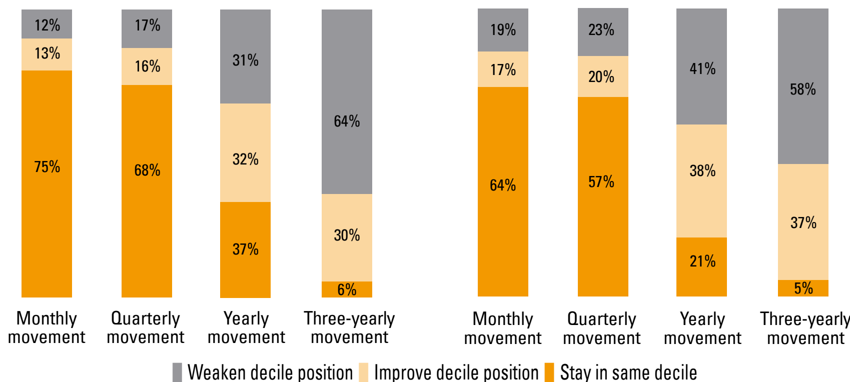
Also shown in the graph are the corresponding probabilities of funds either to improve or weaken their decile positions over the four different forward-looking periods. The message this picture sends out is that in the short term (month-to-month) there is a high degree of persistence, but persistence gradually diminishes over longer periods. Over a three-year period the movement of performance rankings almost approximates a state of randomness, which, in a sense, suggests a general absence

What do past studies reveal?

One of the early recorded studies investigated fund performance over the period 1945-1964 and concluded that the average performance of funds and of individual (retail) investors was no better than that which could have been predicted from random chance. Later, some studies confirmed these findings, while yet others found some consistency in the performance of winning and losing funds.

This trend continued, with studies reaching varying conclusions, but mostly finding only some persistence in the short term, or no persistence at all. Significantly, one study tracked performance results to the characteristics of individual managers and found that background factors – like the quality of education, tertiary education institution attended and access to social networks – played a part in explaining performance differences between good and bad funds.

Previous South African studies arrived at similar conclusions, but pointed out that there was a tendency by some top performers to deliver superior performance consistently. Over long-term review periods, especially in the middle rankings, persistence declined and performance movements became more random in nature.



of longer-term investment skill in the market.

To shed further light on these patterns, the investigation proceeded by separately studying funds that ranked in the top-third and bottom-third groups, as shown in the two graphs above.

Comparing the patterns emerging from grouping funds in this way led to interesting observations. In the shorter term, the top-performing funds showed substantially higher tendencies to repeat their performance rankings than the bottom funds. Compare the 75% versus 64% month-to-month and the 68% versus 57% quarter-to-quarter. The top group also displayed lower tendencies to weaken its rankings than the bottom group for up to the year-on-year analysis.

Another part of the research applied quartile rankings and tracked how individual funds maintained their rankings in the top quartile, the middle quartiles or the bottom quartile over rolling three-year, five-year and ten-year investment periods.

This investigation found:

- In the three-year period, two funds stayed in the top quartile throughout, while another three funds maintained top-quartile rankings for at least half of the time. A similar pattern emerged at the bottom where three funds ranked in the bottom quartile for almost all the time. In the middle ranks there was a high spread of relative movement.
- For the five-year period a very similar pattern emerged. The top quartile was dominated by two funds for the whole period, while another fund stayed there almost 90% of the time. But another two stayed in the bottom quartile for more than 90% of the time. Again the middle-ranked funds displayed a wide spread of movement either way.
- The ten-year analysis repeated the same pattern. Two funds remained in the top quartile, two in the bottom, and the rest varied their positions more randomly.

Also evident from these three analyses was that quite a number of funds moved only between the bottom and middle quartile positions, never to the top.

Lastly the research compared fund performance against the ALSI Index. This investigation found that some funds repeatedly managed to beat the index. The index itself showed wide performance dispersions but, on average, performed at above the halfway mark (at about the 60th percentile). Certain funds never once managed to beat the index.

Past performance is not the magic

The results of the study are in line with previous international and local studies. Once again, persistence was shown to be confined to the short term – reaffirming that past performance data do not provide predictive insights about long-term performance.

One can argue that a few top-ranked funds indeed succeeded in outperforming the rest for prolonged periods, thus showing longer-term persistence. In the same way one can reason that some weak performers remained in the bottom rankings with religious consistency. However, the flaw here is that statistical analyses of past performance did not disclose the secret for identifying those managers that will stay ahead of the others.

More than anything, the study confirmed how important it is to gather information regarding the investment philosophies and strategies of fund managers. Instead of relying solely on past performance, investors should rather form qualitative opinions about fund managers' skills to deliver superior performance over time.

The magic may lie in the ability to learn who the true sages in the industry are. ■

These findings were published by DANIEL WESSELS (pictured) and PROF NIEL KRIGE in the *South African Journal of Business Management*, 36(2) in 2005, in an article titled: *The persistence of active fund management performance.* Daniel Wessels, under the supervision of USB's Prof Krige, originally presented this study to the USB as an MBA research report in December 2004. USB awarded a distinction for the research report.