AN INVESTIGATION INTO SOUTH AFRICAN GENERAL EQUITY UNIT TRUST (MUTUAL FUND) PERFORMANCE DURING DIFFERENT ECONOMIC PERIODS
DE Bertolis and M Hayes

Key words: South Africa; unit trusts (mutual funds); equity; economy; unit trust (mutual fund) investment managers; alpha; beta

Purpose of your paper: South Africa’s first unit trust (mutual fund), Sage Fund, was established in June 1965 with approximately R600 000 under management, R41 million at December 2012 price levels. Since then there has been huge growth in the unit trust (mutual fund) industry in South Africa: as at the end of 2012, there were 704 South African domestic unit trust (mutual fund) funds available, with a market value of R1 160 billion.¹

As unit trusts (mutual funds) are popular investment vehicles for the retail market, the Actuarial Society of South Africa’s Investments Committee has explicitly expressed interest in research on the performances of unit trusts (mutual funds) and their underlying asset managers. This paper is a partial response to this broad research question.

The primary aim of this paper is to investigate the performance of general equity unit trust (mutual fund) investment managers relative to the market over different economic periods. The three periods of interest are those characterised by:
- Economic downturn
- Stable or average economic growth
- Above-average economic growth

This paper also investigates whether unit trust (mutual fund) investment managers outperform the market on average over the entire investigation period.

Given the findings of the above research questions and assuming that investors can correctly predict the economic cycles, the paper then investigates whether there might be optimal investment strategies using South African general equity unit trusts (mutual funds) during different economics periods.

Synopsis:

ABSTRACT
This paper investigates the performance of South African general equity unit trusts (mutual funds) relative to the FTSE/JSE All Share Index during the period January 1994 to December 2012. The period under investigation was split into six further sub-periods each having a specific economic cycle: a downturn, average growth or robust growth. Unit trusts (mutual funds) are shown to have underperformed in economic downturns and outperformed in periods of robust growth, while no conclusions can be made about unit trust (mutual fund) performance during periods of average growth. Overall, unit trusts (mutual funds) showed slight outperformance, but this was not found to be persistent.

CONCLUSIONS

A number of conclusions, which link to our initial research questions, can be drawn from the analysis of results.

**RESEARCH QUESTIONS**
Over the entire investigation period, January 1994 to December 2012, the risk-adjusted outperformance of South African general equity unit trust (mutual fund) investment managers of 0.99% was not statistically significant at the five percent level. This outperformance is statistically indistinguishable from luck.

The risk-adjusted performances of unit trust (mutual fund) investment managers during periods of stable economic growth were also statistically indistinguishable from the performances of the market.

During periods of economic downturn, however, unit trust (mutual fund) investment managers significantly underperformed relative to the market, on a risk-adjusted basis.

In contrast, during periods of robust economic growth, significant risk-adjusted outperformance of the market was exhibited by unit trust (mutual fund) investment managers on average.

The alpha generation pattern may be explained through argument of a momentum investment strategy. The betas of the unit trusts (mutual funds), however, were significantly less than one over all sub-periods, which is not consistent with a momentum argument. We suggest that the effect of cash holdings distorts the observed beta values.

Based on the data gathered, an effective investment strategy using South African general equity unit trusts (mutual funds) would be to buy unit trusts (mutual funds) at the start of a period of robust growth and sell before an economic downturn. The problem with this strategy is determining the start and end of different economic periods in advance.

**ADDITIONAL RESEARCH**
Investigate the appropriateness of the market benchmark for South African general equity unit trusts (mutual funds). In particular, what the implications are of unit trust (mutual fund) benchmarks being different to the market benchmark?

Apply more complex risk-adjusted models to the performance data, such as Carhart’s (1997) four-factor model.

Adjust the models to allow for the effect of the cash holdings, which are required to deal with unexpected cash flows.

Investigate the alpha generation capabilities of investment managers for other asset classes.