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# Investment Analysts Journal

## Issue 74 in brief

### **Beta, size and value effects on the JSE, 1994-2007**

*D Strugnell, E Gilbert and R Kruger*

This paper builds on the observations of Van Rensburg and Robertson (2003a), who found persistent size and price-earnings effects in the cross-section of returns on the JSE, but surprisingly found that beta had, if anything, an inverse relationship with returns. Based on stock returns from January 1994 to October 2007, this portfolio-based study finds support for these earlier findings. However, when betas are estimated by the Dimson Aggregated Coefficients method with a lead and lag of at least three months, to compensate for the weaknesses of Ordinary Least Squares regression in the face of thin trading, the relationship between beta and returns loses its statistical significance. We are left with the conclusion that beta has no predictive power for returns on the JSE, invalidating the CAPM, at least as it is commonly applied, based on a market proxy of the All-Share Index. We find further that the size premium is concentrated in the smallest stocks on the JSE, with no significant difference in returns between the four largest quintiles, and tentative evidence that it has been reducing over time.

### **Active share on the JSE**

*C Muller and M Ward*

Fund managers earn a portion of their fees by out-performing a benchmark, typically an index. To out-perform, they may leverage the fund or engage in scrip lending, but usually they “stock-pick”, taking positions in the market which differ from those of the benchmark, namely: “active share”. Several factors in the fund’s mandate may constrain the level of active share in a fund, *inter-alia*: limits on specific equities or sectors, tracking error constraints around the benchmark or limits on short-selling.

We find that the percentage of active share on the JSE has declined from around 50% to 15% over the last 20 years, which is consistent with research elsewhere. This indicates that fund managers are unable or unwilling to take active positions. In contrast to other studies, we find no relationship between the level of active share and a fund’s return, raising doubts about the stock picking ability of fund managers. Finally, we observe that some index-tracking funds (with low active share) consistently out-perform around 80% of domestic general equity funds on the JSE over five-year holding periods. These findings challenge the high fees charged by many fund managers.

### **Do the value, size and January effects exist on the JSE?**

*C Auret and R Cline*

This paper updates and expands the study done by Robins, Sandler and Durand (1999) in which they investigated whether or not the inter-relationships between the value, size and January effects can be detected on the JSE. The aim of this study is to investigate whether or not their findings can be corroborated in the first period and whether these effects can be detected in the second period. Therefore, the two periods used in this study are from January 1988 to December 1995 (chosen to coincide with Robins *et al.*, 1999) and from January 1996 to December 2006. No significant value, size or January effects were found in either of the periods. This is partially consistent with Robins *et al.* (1999)’s findings in so far as they do not find significant value or size effects. However, unlike Robins *et al.* (1999), no January effect was evident in either period.

### **Constraints on investment weights: What mandate authors in concentrated equity markets such as South Africa need to know**

*H Raubenheimer*

This article demonstrates the importance of setting risk budgets and constraints mindful of the nature of the chosen benchmark and the investment environment. The asymmetrical inefficiency of the long-only constraint when applied to a concentrated investment environment such as the South African equities market is illustrated. We estimate the optimal distribution of investment weights in each security in the context of standard portfolio construction techniques and typical South African equity benchmarks and market conditions. These distributions provide guidance to mandate authors who are considering allowing limited shorting in their net long portfolios as to the amount of gearing that is likely to be required. These estimates also show authors of long-only mandates the circumstances and assets for which their restrictions are materially binding.