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# The Investment Analysts Journal

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## This issue in brief

### **The efficient market hypothesis: Evidence from ten African stock markets**

The paper investigates the weak-form efficiency of ten African stock markets using the runs tests on daily price data for individual stocks. To adjust for thin trading, returns are measured using the trade-to-trade approach and divided by the number of days between trades. It is found that the returns for the majority of stocks on the Namibian, Kenyan and Zimbabwean stock exchanges follow the random walk. These markets are, therefore, considered to be generally weak form efficient. For the remaining markets, the majority of stocks rejected the random walk hypothesis. Thus the possibility of devising profitable trading strategies on these markets cannot be entirely dismissed.

### **The impact of liquidity on mean reversion of share returns**

This paper investigates the effects of liquidity on mean reversion of portfolio returns constructed from shares listed on the JSE Securities Exchange for the period 1983-2005 using a dataset corrected for survivorship bias. A new liquidity measure – the liquidity cap – is formulated and its impact on the relative (abnormal) returns of high price to earnings ratio (P/E) and low P/E ratio portfolios is evaluated. There is conclusive evidence that liquidity does affect the abnormal returns attributable to the presence of mean reversion – but in an unexpectedly asymmetrical way. Positive abnormal returns due to mean reversion are significantly reduced for the more liquid low P/E portfolios but the negative abnormal returns of high P/E portfolios increase when only more liquid shares are included in the portfolios.

### **Performance of newly listed mining stocks on the London AIM and Toronto TSX-V Stock Exchanges**

This study explored the returns from new mining listings for the period January 1997 to June 2006 on the two most prominent junior mining stock exchanges in the world, London's Alternative Investment Market (AIM) and the Toronto Venture Exchange (TSX-V). Initial returns averaged 6,3% and 38,9% on AIM and the TSX-V respectively. Whilst the initial premia on TSX-V were similar to previously published Canadian data, the initial returns on AIM were substantially lower and suggest that new mining issues are more accurately priced on AIM. The after-market returns for periods up to three years after listing were generally not significantly different from zero on AIM, but ranged from -6% after six months to -78,7% at the end of three years on the TSX-V. The relationship between life-cycle stage, size of issue and type of commodity mined were also investigated.

### **The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE**

This research focuses on the relationship between corporate governance disclosure and financial performance of companies on the JSE. An independent measure of corporate governance disclosure, G-Score, was created consisting of 29 governance disclosure factors. A total of 97 companies from 9 sectors on the JSE were rated using G-Score over from 2003 to 2005. The average G-Score was compared to financial performance indicators including share price return, market-to-book-value ratio and P/E ratio. Portfolios of shares were created for sectors, High portfolios (G-Score > 75%) and Low portfolios (G-Score < 50%). High portfolios within each sector outperformed the sector index in each case, indicating above average returns over the time period. Similarly the Low portfolios all underperformed the sector index.

### **Distributional properties of JSE prices and returns**

This paper investigates the random walk properties in JSE security prices and returns, in order to appraise the relevance of traditional unconditional asset pricing methodologies, which are based on the assumption that returns are independently and identically distributed (iid) and jointly multivariate normally distributed. A battery of tests for unit roots, normality and linearity is invoked. As documented for most other markets, the distribution of the prices and returns is inconsistent with the iid normal assumption. In particular, JSE logarithmic security prices are I(1) processes, while logarithmic returns are neither normally nor linearly distributed. This evidence renders suspicious the appropriateness of standard methodologies for empirical tests of both the CAPM and the APT, and implies that the JSE security prices could be profitably non-linearly predictable over time, contrary to the EMH.

### **Extreme value theory – an application to the South African equity market**

It is frequently assumed that returns are normally distributed for the statistical modelling of financial markets. Normal return based models perform well for small asset return fluctuations; however, markets do exhibit large moves occasionally which are not modelled well by the normal distribution assumption.

This paper considers an application of extreme value theory (EVT) to the FTSE/JSE TOP40 index, especially in the light of recent big moves. The difference between returns obtained using the frequent assumption of normal returns and that obtained using EVT is demonstrated, suggesting that EVT is a very useful tool for realistic risk management analyses.