

Autocorrelation and price impact in high frequency trades on the Johannesburg and Sao Paulo Stock Exchanges.

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Abstract / Resumo:

In an order book market, price impact refers to the correlation between some incoming order and the subsequent price-change which results. We review this phenomenon and apply the approach of Bouchaud, et al (2004) to expose related stylised facts in the most frequently traded stocks on the JSE and the BM&F BOVESPA. Consistent with the analysis in Bouchaud, et al, we find that correlations in the signs of trades decay as a power-law. We examine the empirical behaviour of the so-called response or resilience functions, which describe how a single trade impacts subsequent trades for each stock, and discuss the theoretic implications of our findings.