

## **The weak-form efficiency of Chinese Stock Markets : thin trading, nonlinearity and episodic serial dependencies.**

### **ABSTRACT**

Motivated by the shortcomings of earlier Chinese efficiency studies, the present paper re-examines the weak-form efficiency of Shanghai and Shenzhen Stock Exchanges. Specifically, our adopted methodologies mitigate the confounding effect of thin trading on return autocorrelation, detect both linear and nonlinear serial dependencies in the adjusted returns series, and capture the persistence of dependency structures over time. The result shows that the adjusted returns series from both markets follow a random walk for long periods of time, only to be interspersed with brief periods of strong linear and/or nonlinear dependency structures. This suggests that there are certain time periods when new information is not fully reflected into stock prices. Another interesting finding is that the existence of serial dependencies in both the Shanghai and Shenzhen Stock Exchanges follows one another closely after October 1997. It indicates that both markets respond in a similar way to influences from political, economic, social and institutional changes.

**Keyword:** Nonlinearity; Thin trading; Market efficiency; China; Stock market.