

The Efficiency of Asian Emerging Stock Markets in the Pre- and Post-Liberalization Period

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Abstract

This paper provides tests of the random walk hypothesis and market efficiency for seven Asian emerging markets due to the influence of financial market integration. Random walk properties of equity prices influence the return dynamic and determine the trade strategies of investors. We use the single variance ratio tests of LO and MACKINLAY as well as the multiple variance ratio test of CHOW and DENNING to examine the stochastic properties of local index returns and to test the hypothesis that stock market prices follow a random walk, respectively. The multiple statistical comparison of variance ratios is based on the Studentized Maximum Modulus distribution with control of the joint-test's size. We test also directly for the weak-form market efficiency using a nonparametric runs test. All these tests are particularly useful for investigating stock prices whose returns are frequently not normally distributed. Documented evidence shows that from the perspective of local investors weekly stock prices in major Asian emerging markets do not follow a random walk in the pre-liberalization period, whereas in the post-liberalization period the weak-form efficiency hypothesis is generally adopted at the 5% level except for the small stock markets of Indonesia and Thailand. These empirical findings suggest that financial integration affects the return predictability in such a way that domestic investors might not be able to develop trading strategies that would allow them to earn abnormal returns.

Key Words: Asian emerging markets, weak-form market efficiency, random walk, multiple variance ratio test, market efficiency, runs test

JEL Classifications: G12; G14; G15

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