

## Abstract

# # C722527 : MAJOR Finance

KEY WORD: Asian / Stock Market / Integration / Time-varying / Roll Regression / CAPM / GARCH / Switching Regime / Market Quality / Granger Causality / Unit Root / Cointegration

Santi Kiranand : An Investigation of Asian Stock Markets Integration.

THESIS ADVISOR : Sunti Tirapat, Ph.D., 148 pp. ISBN 974-333-731-8.

This study attempts to measure the level of Asian stock markets integration to world capital market. One way in measuring the level of market integration is to measure the deviation of the equilibrium risk adjusted expected return of identical risk assets in different countries. This measure could be obtained by asset pricing models. In this study, the Conditional Capital Asset Pricing Model (CCAPM) with Generalized Auto Regressive Conditional Heteroskedasticity - GARCH (1,1), the governing process for beta, is chosen to measure the "degree of market integration". An alternative in measuring the level of market integration, in this study, is to measure the weight or sensitivity of the asset's price on local and global factors. The more the weight on global factors, the higher level of market integration is implied. This measure is called "the likelihood of market integration". The regime switching models are applied to this measure. Both measures are allowed to be time-varying in this study. Seven Asian countries: Hong Kong, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand; with United States and World capital market are studied. Hong Kong and Singapore are categorized as developed markets, while the rest are the emerging markets. Period of study covers 1990 – 1999. The main contribution in this study is to link the measure of stock market integration to the stock market quality, which are represented by market liquidity and volatility.

Singapore and Hong Kong are in the highest level of integration to world capital market, indicated by any measure. Both measures of stock market integration do not yield inconsistent measure. However, the degree of stock market integration seems to capture the change in level of integration more sensitively.

The empirical result of the unit root test confirms Bekaert and Harvey (1995) that the level of Asian stock markets integration is time-varying except the likelihood of market integration of Malaysia and Thailand. From Granger causality test, either the market quality leads the market integration or *vice versa* can not be concluded. The effect of the two events might be simultaneity. However, the cointegration test provides better conclusion that there exists an equilibrium relationship between the Asian stock market quality and the level of Asian stock market integration. Thus, the policy implementation concerning the liberalization with the expectation of sudden change in market microstructure should not be the case. A preliminary investigation of Thailand portfolio capital inflow is also done. It is found that the capital inflow can be reconciled with the level of domestic investment. This implies the relationship between market integration and investment. The major source of the portfolio capital inflow is Asian region.

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