Short-horizon asymmetry in conditional mean of ASEAN stock market returns

ABSTRACT

This paper describes the return patterns of six ASEAN markets (Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam) using an autoregressive exponential GARCH-in-mean model, also known as AR-EGARCH(1, 1)-M. Estimating the model for each market using daily data from August 2000 to May 2010, we find these markets generally have quick mean-reversion speeds but quite distinct patterns of return dynamics. In the Indonesian market, the evidence seems to strongly suggest asymmetric mean reversion and overreaction of the market during downturns. The Vietnamese market exhibits the most persistent return autocorrelation with some evidence pointing to higher persistence during market downturns. While there seems to be no asymmetric pattern in the return adjustment of the Malaysian and Filipino markets, there is no evidence indicating significant serial correlation in the markets of Singapore and Thailand. Thus, technical trading strategies are applicable for the markets of Indonesia and Vietnam only.

Keyword: Asymmetry; Mean reversion; Volatility; AR-EGARCH(1, 1)-M; ASEAN markets