



**EVALUATION OF VOLATILITY FORECASTING
IN STOCK MARKETS:THE CASE OF ASEAN
ECONOMIC COMMUNITY (AEC)**

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ABSTRACT

This study aims to examine the relative accuracy of volatility forecast models of stock markets return in the 5 AEC countries via various forecast evaluation measurements. The models in this study are basic and prominently applied through many based assumptions. The result is shown that there is no dominant volatility forecast model among all measurements. However, under risk management framework, LINEX(-30) measurement indicates that EGARCH(1,1) is the most accurate model for volatility forecast at 1-day horizon in Thailand, Malaysia and Indonesia. While, GARCH(1,1) and GJR-GARCH(1,1) outperform in Singapore and Philippines by respectively. Magnitude of forecast error becomes larger under estimation at longer horizon period; non-ARCH models such as simple regression (REG) model ranks is superior in Thailand, Singapore and Indonesia; while, random walk (RW) model is the best model in Malaysia and Philippines. Historical mean (HIS) model performs poorly under long horizons and EWMA model is suggested to avoid under all horizons at 1-day, 10-day and 20-day.

Keywords: Volatility, Forecast, GARCH, LINEX, AEC