Independent Study Title DO RANGE-BASED ESTIMATORS IMPROVE

THE PERFORMANCE FORECASTING OF

GARCH-TYPE MODELS? THE EVIDENCE OF

STOCK EXCHANGE OF THAILAND

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## **ABSTRACT**

As the actual volatility is inherently latent. We use the square return and three range-based estimators as the volatility proxy to evaluate the forecasting performance of various GARCH-type models from SET index return. The Root Mean Squared Error (RMSE) and Superior Predictive Ability (SPA) test of Hansen (2005) are applied to measure the goodness of fit. The empirical results indicate that the EGARCH model is superior in forecasting ability than other GARCH-type models for rolling out-of-sample forecasting. However, with the fixed-window, the findings are quite striking depend on the prediction horizon. In addition, the squared return as an exogenous variable can improve the forecasting performance of GARCH-type model while the range-based estimators cannot.

**Keywords**: GARCH-*type* models, Range-based estimators, Volatility forecast, Root Mean Squared Error (RMSE), Superior Predictive Ability (SPA) test