

Evaluation of volatility performance of GARCH models on Carnegie Strategyfund

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Abstract

This thesis examines three commonly used forecasting models, the GARCH model, the EGARCH model and the TGARCH model. Three main themes will be covered throughout this paper. The evaluation of time horizons that creates the best conditions for future forecasts, determining which distribution suits the error term and the evaluation of which GARCH model provides the best sample-fit in terms of AIC and BIC. The results indicated that both EGARCH and TGARCH that are more complex models outperformed the symmetric GARCH. When it comes to the distribution term it was quite evident that the Student-t distribution provided better sample-fit compared to the Gaussian distribution. This was quite expected given the fact that negative shocks tend to have larger impact on the volatility market compared to positive shocks, resulting in heavier tails in the distribution.

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