ABSTRACT

Prediction or forecasting is one thing that is very important in making decisions. With predictions, someone will know the approximate future so as to determine the measures to be taken to profit or avoid risk. In investing, investors should be aware of future stock movements in determining the decision to buy, sell, or hold. To know the exact movement of the stock price, investors need a tool that is able to accurately predict the outcome closer to the truth.

However, the problem is the movement of the stock price volatility is an instability in the movement. This makes the stock price data is heteroscedastic. This causes heteroscedasticity parameter estimates using ordinary regression equation (OLS) is not biased but the standard error and confidence level becomes too large, due to be added is a mistake in interpreting the model.

The purpose of this study to predict the stock price of listed companies in LQ45 is stock company AALI, ADRO, ASII, BBCA, BSDE, INTP, TLKM, UNTR, and UNVR. Based on testing of ARCH effects, which can be predicted by the model there are seven companies that AALI, ASII, BBCA, INTP, TLKM, UNTR, and UNVR. By using MAPE note that predictions of future stock price GARCH model has a very small error rate is <5%. Thus, it can be concluded that the GARCH model is a good model to predict future stock prices with a high degree of accuracy.

Keywords: volatility, heteroscedasticity, variance, error term, GARCH