

## ABSTRACT

*Futures contract transactions are transactions used to hedge assets are used as a benchmark of threat risks of uncertainty about future price changes. Gold index futures contracts have the highest percentage of transaction growth during 2015, which amounted to 104.83%. Gold futures index being JFX product is gold index of Loco London Gold market with a contract duration for 3 months. The accuracy of the prediction becomes a problem of investing in gold. In order to predict precisely, investors need a system or model of analysis in making predictions.*

*This study will estimate and develop ARCH-GARCH models to predict the price of gold futures contracts in the future. Four stages to estimate the ARCH and GARCH models, namely, (1) the identification of ARCH effects, (2) estimation of the model, (3) evaluation model, and (4) do forecasting. Submission of a prediction error value of each model are presented in the form of Root Mean Square Error (RMSE), Mean Absolute Error (MAE) and Mean Absolute Percentage Error (MAPE).*

*Using the measuring tool RMSE, ARCH models (1) to be most excellent models in predicting the price of gold futures contracts with a value of USD 11.23902407 prediction error. Using the measuring tool MAE, GARCH (1,1) be the best models to the error value of \$ 9.495692364. Using the measuring tool MAPE, GARCH (1,1) be the best model with an error value of 0.86665488 % or prediction accuracy of 99.14%.*

*Keyword: Hedging, Loco London Gold, ARCH, GARCH, RMSE, MAE, MAPE*