ABSTRACT

Rupiah exchange rate against US dollar depreciate in 2012-2015 then improved in the year 2016 to 3rd quarter in the year 2017. While the Indonesia Composite Index (ICI), experiencing fluctuations each day and the closing price is likely to rise in the period January 3, 2012 to September 29, 2017. The correlation between money market and capital market causes exchange rate volatility and volatility of to check whether the effect of reciprocity or not. In addition, this study also model GARCH by choosing the most appropriate modeling to analyze the effect of exchange rate volatility with IHSG volatility.

From the data collection from 3 January 2012 until 29 September 2017 we obtained 1404 time series data which will then be analyzed with Autocorrelation by using Durbin-Watson Method, Unit Test Root by using Augmented Dickey-Fuller, Heteroskedasticity by using White Test, GARCH Modeling and Granger Causality Test.

Based on the results of the study, the exchange rate data and the ICI data are experiencing autocorrelation problems, not stationary at the level and stationary in the first differentiation by changing the daily time series data into a return. The stationary data, exchange rate return and ICI returns have heteroscedasticity problems, GARCH modeling can be used by adding ARMA (3,1) into the equation. The selected GARCH (1,1) modeling result is the volatility of exchange rate influencing the volatility of ICI. Granger Causality test shows that the volatility of exchange rate and volatility of IHSG have two-way granger cause.

This study shows that exchange rate information can predict the condition of stock price index in capital market and movement of Indonesian Composite Index (ICI) can predict exchange rate movement in foreign exchange market. Appropriate predictions by investors will reduce the risk and increase the yield in investing if the money market and capital markets are fluctuating high.

Keywords: *GARCH, Volatility, ICI, Exchange Rate*