ABSTRACT

The purpose of this study is to examine the implementation of option contracts on Black Scholes and GARCH opsiton model on the LQ45 index using long straddle strategy. Constructing of a best volatility estimation is the most important thing ini pricing option contracts, which volatility is an important instrument to be included in the model. The process of construction GARCH volatility is formed by determining the best lag of ARIMA. The result of this study are obtained by comparing the average percentage square root error (AMSE) in Black Scholes and GARCH model, where the smaller the percentage value, the better the model will be. Within 1 month of option contract time to maturity (TTM), Black Scholes model is better than GARCH with an error value on call option is 2.77% and 1.56% on the put opsion. Within 2 months of the option contract TTM, GARCH model is better than black scholes with an error value on call option is 8.12% and 4% on the put option. Within 3 months of the option contract TTM, Black Scholes model is better than GARCH with as error value on call option is 12.38% and 5.50 on the put option.

Key Words*: Option Model, Black Scholes, GARCH, Option Contract*