ABSTRACT

During 2009-2018 the yields from the IDX composite experienced fluctuations that resulting in the occurrence of uncertainty (risk) faced by investors through volatility movement. To avoid losses in investing, investors can reduce risk by using derivative instruments as a hedging instrument, an option. The purpose of this study to compare the accuracy of the Black Scholes option model and the GARCH option model on index options using IDX Composite data from 2009-2018 with the long strangle strategy. This research uses quantitative methods with comparative and descriptive approaches, where the accuracy of options is analyzed using average percentage mean square error (AMSE). The results of this study showed that for the one month option the GARCH model is more accurate for call option with 0.26%, while the Black Scholes model is more accurate for put option with 0.18%, two month option for the GARCH model is more accurate for call option with 0.92%, while the Black Scholes model is more accurate accurate for put option with 0.26%. for the three month option the Black Scholes model is more accurate for call option and put option with 2.00% and 0.31% respectively.

Keywords: *Black Scholes Option Model, GARCH Option Model, Long Strangle Strategy, derivative, Call Option, Put Option*