ABSTRACT

The spread of Coronavirus directly affected of the contagion effect to several countries in the world, including in China, Thailand, Indonesia and Singapore. The financial sector is one of the areas that is affected by the spread of coronavirus various countries including the stock index showing instability on the chart. This study aims to analyze whether there is a contagion effect among the markets of China, Thailand, Indonesia and Singapore and which countries have a contagion effect. The data in this study used time series data in by the closing price of the stock exchange from the Shanghai Stock Exchange 50 (SSE 50) stock index, Stock Exchange of Thailand 50 (SET 50), LQ45, and the Straits Times Index (STI) from 2 January 2020 until 31 July 2020. The data of daily movement is taken from yahoo finance and investing.

The data analysis uses the method of Augmented Dickey-Fuller Unit Test, Heteroscedasticity Test, ARMA Modeling, Generalized Autoregressive Conditional Heteroscedasticity (GARCH) Modeling, and modeling on the Granger Causality Test with stock returns as a variable to be used in this study on the Shanghai Stock Exchange 50 (SSE 50) stock index, Stock Exchange of Thailand 50 (SET 50), LQ45, and the Straits Times Index (STI).

The results of the research study the results show that SSE50 returns do not experience heteroscedasticity problems so that it cannot continue for GARCH modeling. Meanwhile SET50, LQ45, STI has problems with heteroscedasticity, so that GARCH modeling can be done. The resulting best GARCH modeling is GARCH (1,2), GARCH (1,1), GARCH (1,1), GARCH (1,1), GARCH (1,2), and GARCH (1,3). There is a contagion effect in each of the capital markets, but the country that is not connected is the capital market in Thailand (SET50). The movement of shares on STI is influenced by the movement of SET50 shares, the movement of LQ45 shares is influenced by the movement of STI and SET50 shares.

Keywords: *Stock Return, Contagion Effect, Stock Index, GARCH, Granger Causality*