ABSTRACT

Bitcoin is the first virtual or digital money based on peer-to-peer and cryptographic technology that is independent of central authorities such as banks or other authorized institutions. Bitcoin can also be called digital gold. This is because Bitcoin and Gold are considered to have similar characteristics. The characteristic equation between Gold and Bitcoin is, its value fluctuates and tends to rise, the amount of which is equally limited, requires more costs in mining and is equally not controlled by the government making the reason why Bitcoin is equated with Gold, the only difference is Bitcoin forms gold is virtual while Gold is in the form of real assets. The equation between Bitcoin and Gold allows the two assets to have a spillover effect between each other because of their similarity in characteristics.

This study was conducted to determine the spillover volatility between Bitcoin and Gold, and the direction of volatility. The data used is the daily data on Bitcoin prices taken from the website of the Cryptocurrency Market Capitalizations and Gold taken from the Market Maker website, which is historical Gold data in the future. Then, the method used is a unit root test, Augmented Dickey-Fuller test, GARCH test and Granger Causality test.

The results of the analysis using GARCH show that there is no volatility spillover between Gold and Bitcoin, as well as the Granger Causality test showing that there is no causal relationship from Gold to Bitcoin. Thus, investors can consider diversifying investments in these two instruments, both Gold and Bitcoin.

Keywords: volatility spillover, Bitcoin, Gold, GARCH, Granger Causality.