# How information asymmetry and cybercriminal risk affect volatility and return of cryptocurrencies


## ABSTRACT

This research studies the factors that affect volatility in cryptocurrency markets. The relationship between information asymmetry and cybercriminal risks are studied against the volatility and return of cryptocurrencies, namely, Bitcoin (BTC), Ethereum (ETH), Bitcoin Cash (BCH) dan Ripple (XRP). These cryptocurrencies are selected as they are cryptocurrencies that are being traded by Luno, Sinergy and Tokenzie (the exchange companies regulated by the Securities Commissions of Malaysia). 730 observations were collected for each cryptocurrency via the CoinMarketCap website, from 1 January 2019 to 30 December 2020. The ADF test and the Kolmogorov-Smirnov test have been conducted before the analysis of the data. The results show the stationarity and non-normality of the data collected. The EGARCH-GED model is used to analyse the relationship between information asymmetry and volatility. The findings indicate a significant relationship between information asymmetry and volatility in BTC, ETH ad XRP. The Event Study Method (ESM) is used to analyse the effect of cybercriminal risks on returns. The result shows that all four cryptocurrencies show a significant relationship between cybercriminal risks and returns.



**Keyword:** Cryptocurrency; Cybercriminal; Volatility; Cumulative abnormal return; EGARCH-GED