

ABSTRACT

This research is motivated by Bitcoin which is used as an alternative investment tool, and stock which is one of the most popular investment tools in the investment world. Both of these investments have characteristics of high fluctuating price movements. Thus, this study agrees to examine how much risk is faced by investors when choosing to invest in Bitcoin and Jakarta Composite Index (JKSE), using Value at Risk (VaR) method.

VaR is a risk measurement tool that estimates losses on an asset with a certain level of confidence and in a certain period. The research methodology that is used in this study is VaR with the Variance-Covariance method and involves the GARCH model to estimate volatility. The data that is used in this study is secondary data consisting of daily price data of Bitcoin obtained from [coingecko.com](https://www.coingecko.com) and JKSE obtained from finance.yahoo.com. The research period is from January 1, 2017, to Desember 31, 2019. The results showed that Bitcoin has a higher risk compared to JKSE, which is about five times higher.

Keywords: Bitcoin, JKSE, Value at Risk, GARCH, investment