

ABSTRACT

Investment is an investment activity carried out for the purpose of gaining profit in the future by entrusting their assets to several assets such as stocks, securities such as deposits and bonds, property, precious metals, jewelry, foreign currencies, cryptocurrencies, commodities, startup companies, and so on. Stock investment is one of the investment options that is considered profitable because its value will go hand in hand with the performance of the company from the stock, and also the value of regular dividends which are an added value to the profits obtained. Cryptocurrency is also now starting to become a new alternative in investment solutions because of its flexibility and decentralized concept which makes cryptocurrency have very high volatility where it has a fairly high risk but also has a high return value.

Due to the advantages and disadvantages of Stocks and cryptocurrencies, an idea emerged to be able to diversify between stocks and cryptocurrencies in order to find the best and most optimal investment results by creating a portfolio that is a combination of stocks and cryptocurrencies. This is based on the movement patterns of the S&P500 and Bitcoin which show compatibility and interrelationships between each other.

In this study, an analysis will be conducted on the risks of investing in technology company stock-based assets that will be represented by Google and Apple, and cryptocurrency-based asset investments that will be represented by Bitcoin and Ethereum. This study will focus on the period from January 1, 2020 to December 12, 2024 by utilizing the formula of Modern Portfolio Theory, and testing using the Risk Adjusted Ratio, Sharpe Ration, and Treynor Ratio. The differentiating point in the portfolio adjustment process in this study is the investment object where the study was conducted by diversifying Google and Apple stocks with Bitcoin and Ethereum cryptocurrencies.

The study shows that the results of the Portfolio from the combination of Google, Apple, Bitcoin and Ethereum have more optimum profitability results, when compared to investing in just one investment instrument.

The results of this study are expected to be useful as a reference that can be used to set investment strategies for investors who are interested in investing in stocks and cryptocurrencies to be able to get the most optimal results with the lowest risk.

Keywords: Analysis, Investment Risk, Portfolio, Markowitz Model, Stocks, Cryptocurrency, Investment, Google, Apple, Bitcoin, Ethereum