Abstract

Portfolio optimization is one of the popular topics for research. Various techniques to improve the performance of Mean Variance (MV) as a modern portfolio model. MV is the most widely used portfolio optimization model, this model was introduced by Markowitz in 1952. One approach to improve the MV model is by considering stock return predictions. In this study, Autoregressive Integrated Moving Average (ARIMA) is used to predict the Jakarta Islamic Index (JII) stock. The Mean Variance Forecasting (MVF) model which is the development of the MV is used to form a portfolio. The results from the portfolio are then compared with the JII index data. In this study, the portfolio built using MVF produces better performance than the JII index, with a portfolio return of -0.0041 greater than the return of JII -0.0062. And the MVF variance of 0.0207 is smaller than the JII variance of 0.0308.

Keywords: Portfolio optimization, ARIMA, Mean Variance Forecasting (MVF)