

ABSTRACT

The determination of stocks and the formation of optimal portfolios are the main aims of asset management, where the model to achieve optimal portfolios involves the determination of the number of stocks of companies listed in BUMN20. This is done by utilizing a hybrid model that combines Konno and Yamazaki's multi-objective mean-variance (MV), Mean Absolute Deviation (MAD), And Value-At-Risk (VaR) techniques to construct the optimal portfolio. To strengthen the selection process, robust analysis utilizing R programming is used.

This research begins by analyzing multi-asset data derived from the BUMN20 index, followed by an examination of historical data covering the period between 2018 and 2022. In this research on MV, MAD or VaR models are expected to have the ability to produce a portfolio of stocks that offers an anticipated rate of return of 5%, while maintaining a level of risk. Therefore, it indirectly underscores the importance of strategically managing risk in volatile conditions, thus ensuring that investors can make informed decisions aimed at maximizing returns while mitigating potential risks.

Keywords: Portfolio Optimization, BUMN20, MV, MAD, VaR, R Language