

ABSTRACT

Investment is an activity of allocating funds with the expectation of generating profits in the future. The approach that stock investors can take to minimize investment risk is by forming a stock portfolio. Company efficiency is one of the factors that affect portfolio performance. Investing in more efficient companies tends to have greater profit potential. In this study, the selection process for stocks listed in the LQ45 index is based on the Data Envelopment Analysis (DEA) method to identify efficient stocks. Efficient stocks based on the DEA-CCR and DEA-BCC models, or can be said to operate optimally ($SE=1$), will be selected as candidate stocks for portfolio composition. The portfolio is developed based on the Mean-Semivariance model, where risk is assessed using Value at Risk (VaR) through Historical Simulation, and performance is evaluated using the Sharpe Index. The results showed that there were 5 stocks with optimal scale efficiency ($SE=1$). The allocated weights for each stock in the constructed portfolio are BBCA (45,16%), INDF (25,50%), ITMG (10,10%), SIDO (10,61%), and UNTR (8,62%). VaR analysis shows a potential loss of 1,44%, at the 95% confidence level, while the portfolio's Sharpe Index of 0,030646 indicates good performance and higher returns than risk-free investments.

Keywords: Portfolio, Data Envelopment Analysis, Mean-Semivariance, Value at Risk, Indeks Sharpe