

ABSTRACT

Investors place their funds in stocks in the capital market aiming to obtain maximum returns with minimal risk. Risk can be minimized by diversifying or forming a portfolio, namely by combining various stocks in their investment. One of the optimal portfolio formation methods is Stochastic Dominance, which refers to the relationship between two distribution functions, whether the distribution function is more dominant than other distribution functions. If there are two choices of conditions, A and B, then condition A will be more dominant than condition B if and only if the expected value of utility from A is higher or equal to the expected value of utility B. Stochastic Dominance uses three assumptions about investor behavior, namely first order stochastic dominance states that investors prefer more wealth than less. Second order stochastic dominance states that investors are risk averse. Third order stochastic dominance states that investors are ruin averse or risk taking. In this study, the stocks used to form portfolio are stocks that are consistently in the IDX30 Index during the period January 2020 - October 2023. The stocks are selected based on positive expected return values and low or negative correlation coefficients between stock returns. Risk measurement of the Stochastic Dominance portfolio is calculated using the Expected Shortfall Monte Carlo simulation method. Based on the results of the analysis of 16 consistent stocks, obtained 3 stocks forming the optimal portfolio consisting of PT Bank Central Asia Tbk (BBCA) shares with a proportion of 40%, PT Kalbe Farma Tbk (KLBF) shares by 40%, and PT Telkom Indonesia Tbk (TLKM) shares by 20%, which provides a profit rate of 0.485%. Risk measurement with Expected Shortfall (ES) at a confidence level of 95% and a time period of 1 month obtained an ES value of 12.558%.

Keywords: Optimal Portfolio, Stochastic Dominance, Expected Shortfall.