Abstract

Investment in the stock market is one of investment that has a considerable risk, so investors must have expertise in anticipating the occurrence of these risks. One way is to form a portfolio with little risk. To form a portfolio by minimizing risk, by forming diversification of shares in the portfolio. This study discusses a stock portfolio through the results of the clustering curve of the stock price derived from the P-spline method. P-spline aims to interpolate data to produce a curve that represents the movement of the direction of stock price data. The clustering method in this study classifies the coefficient of P-spline results using the K-Means method. The formation of a portfolio is done by selecting one representative from each cluster based on the value of the smallest stock risk and the value of the expected return is passable. The portfolio assessment method used Mean-Variance and Equal Weight and also look at performance using the Sharpe index compared to the Kompas100 Index. With the results of the shape index value for all portfolios with the Mean-Variance method is better than the Kompas100 Index value while for portfolios with the Equal Weight method only a few portfolios have better performance than the Kompas100 Index.

Keywords: *stock, portfolio, p-spline, clustering , Mean-Variance, Equal Weight*