

ABSTRACT

The rapid growth of the Indonesian capital market necessitates increasingly optimal investment strategies, particularly through the formation of stocks portfolios. The Liquidity Adjusted Capital Asset Pricing Model (LCAPM) is an extension of the conventional Capital Asset Pricing Model (CAPM), incorporating liquidity risk into the calculation of *expected return*. This study aims to optimize the formation of a stock portfolio consisting of members of the IDX Small-Mid Cap Liquid (IDXSMC-LIQ) Index using LCAPM and Quadratic Programming (QP). The QP optimization is performed by imposing constraints that the sum of all portfolio weights must equal one and that all weights must be positive. This constraint ensures the portfolio is constructed without short selling, thereby mitigating the risk of unlimited losses. The analysis resulted in a portfolio consisting of five selected stocks based on criteria of positive realized *expected return*, satisfaction of the normality assumption, and low correlation. The QP optimization successfully allocated the optimal weights to the stocks: EXCL (23,00%), ITMG (24,69%), JPFA (22,45%), MAPI (22,28%), and SSIA (7,57%). Risk evaluation using Value at Risk (VaR) indicated a maximum potential loss of 5,14% of the initial investment fund at a 95% confidence level. Meanwhile, portfolio performance measurement using the Sharpe Ratio yielded a value of 1,066669, demonstrating that the portfolio achieved good performance.

Keywords: Liquidity Adjusted Capital Asset Pricing Model (LCAPM), Quadratic Programming, Short Selling, Value at Risk (VaR), Sharpe Ratio.