ABSTRACT

Construction and Holding Period Risk of Optimum Portfolio Jakarta Islamic Index Stocks

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The purpose of this research applies single index model (SIM) and Markowitz method to construct an optimum portfolio of Jakarta Islamic Index (JII) and calculating the holding period risk with value at risk method. Several stages such as the calculation of stock’s return, expected return, ERB ratio, ranking of stocks and the cut off point are given for the candidate performed of optimal portfolio on single index model. The result of risk and return with each proportion of fund from single index model suggest that the Astra Agro Lestari (AALI) and Kalbe Farma (KLBF) as recommended portfolio. Beside that, construction optimum portfolio also calculating with Markowitz model. The result gave information that AALI and ANTM are the optimum portfolio. These two model’s are measured with four performance measurement such as Treynor ratio, sharpe ratio, Jensen ratio and Information Ratio (IR). Based on those measurement, SIM is better model than Markowitz. Then, from better performance of model, also calculating risk with certainty holding period that investor’s preference. Performance of volatility models used value at risk method for both single instrument and portfolio. Several preliminary tests which are stationary, normally and heteroscedasticity test, were modeled to find best ARIMA time series and find best ARCH/GARCH volatility model for heteroscedasticity test. The result from value at risk model gave that risk of AALI smaller than KLBF. The conclusion of this research is that the proportion of AALI’s investment fund is greater than KLBF. If investor is a risk averse, they would rather spend their fund in to AALI than KLBF, because AALI gave smaller risk than KLBF, at a certain return. If investor is a risk taker, they could invest their funds into any desired portfolio. The estimation performance of VaR does not guarantee the portfolio performance will be consistent in the future, because forecast performance can be used in a short term. These methods was used a thousand of daily return (2007-2010) from stock’s closing price to create time series data.

Keywords: Optimum Portfolio, Jakarta Islamic Index, Single Index Model, Markowitz Model, Value at Risk Method.