ABSTRACT

Portfolio zakat saham is an investment strategy that combines financial principles with modern investment practices in the Sharia capital market. Its main goal is to maximize financial returns while ensuring the investment is compliant with Islamic principles. The main problems identified in this study are how to form an optimal investment portfolio, measure the risk of the formed portfolio, calculate the amount of stock zakat that must be paid, and create an GUI R as a tool to facilitate this process. The research data uses weekly stock data listed on the Jakarta Islamic Index (JII30). The methodology applied uses a comprehensive quantitative approach. First, it involves finding the historical stock return values from secondary data. Next, a multivariate normality assumption test is conducted to ensure the data is normally distributed. Furthermore, a constraint function is added using Quadratic Programming to ensure that portfolio weights are not negative. After the optimal portfolio weights are formed, investment risk is measured using the Historical Simulation method. In addition, this study also incorporates a Sharia aspect by calculating the amount of stock zakat that must be paid by investors after the holding period reaches one Hijri year and meets the gold nisab threshold of 85 grams. All calculations are implemented into a Graphical User Interface (GUI) application using the R-Shiny package, making the analysis and calculation process easier and more interactive. The research results show that the optimal portfolio formed has a diversified weight allocation: MIKA stock at 4.86%, INCO at 10.04%, KLBF at 48.92%, ITMG at 26.59%, and PTBA at 9.59%. The risk measurement using VaR with a 12-month holding period yielded a value of 3.07%, indicating that the maximum potential loss an investor might experience would not exceed 3.07% of the investment value. The zakat calculation from a total investment value of Rp 145,724,048.00 shows that the investor must pay zakat of Rp 3,643,101.00. The development of the GUI R application successfully provides a practical solution for investors to independently perform portfolio analysis and calculate stock zakat.

Keyword: Portfolio, Stock Zakat, Mean-Variance, Value at Risk, Historical Simulation, GUI R,.