



# COMPARISON ANALYSIS OF OPTIMAL PORTFOLIO PERFORMANCE ESTABLISHED FROM LQ45 INDEX STOCK WITH MANDIRI MUTUAL MUTUAL FUNDS PORTFOLIO INVESTA EQUITY ASEAN 5 PLUS

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# ABSTRACT

The increase in the number of investors becomes a huge potential to increase the capacity of the capital market. Among the instruments of investment in the stock market, shares are the most frequently traded. The participation of local investors in investing in the capital market cannot be separated from the expectations of profit or return that can be obtained as well as the risks attached to investment instruments. Risks in stock investments can be minimized by reducing them to a minimal point through the process of diversifying stocks by forming a portfolio. This type of research is descriptive research with a quantitative approach. The stock candidate population used in the formation of the Optimal Portfolio is all of the shares classified into the LO45 Index. While the sample of stock candidates included in the portfolio formation is 41 stocks with purposive sampling technique. The type of data used is secondary data with data collection techniques documentation. In forming the portfolio used the single index model and constant correlation model. While to measure the performance portfolio used measurement scales Sharpe Index, Treynor Index and Jensen Alpha. Based on the performance measures of the Sharpe Index, Treynor Index and Jensen Alpha, the portfolio formed from LO45 shares using a single index model has lower performance than the portfolio performance formed from LO45 stock by using a constant correlation model. Based on the Treynor Index performance measure, the portfolio formed from LQ45 stock using a single index model has higher performance than the Mandiri Investa Equity Asean 5 Plus portfolio.

Keywords: Stock, Portfolio, Sharpe Index, Treynor Index, Alpha Jensen.

# **1. INTRODUCTION**

The capital market has an important role in the economy of a country. The existence of the capital market allows the flow of funds from parties who do not have access to the productive use of these funds to those who do have them so that production activities can run. In addition, the capital market is also a means of distributing welfare to the community through investment activities. The existence of production activities which are followed by the distribution of welfare activities will ultimately contribute to the achievement of economic growth. Therefore, the condition of the capital market in a country is generally able to reflect its economic condition (Sadalia, 2014). Good capital market conditions indicate the country's economy is also good, and vice versa. The existence of this role makes the capital market important to continue to develop. Things that can be done to encourage the development of the capital market include increasing the involvement of the domestic community to invest in it. Higher community involvement will increase the capacity of the capital market because more funds are available for use. Until mid-2016, the Indonesian Central Securities Depository (KSEI) recorded several operational performance improvements. Based on investor development graphs for the period January - July 2016, Single Investor Identification (SID), SRE Securities Sub Accounts and logins to KSEI AKSes facilities have increased. The number of SIDs in the Indonesian Capital Market increased

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by 26 from 388. At the end of July 2015 it became 491. At the end of July 2016, the number of SREs increased by 25 from 494. To 618. AKSes utilization by investors also increased by 18. However, based on the composition of ownership,

The risk in stock investment can be minimized by reducing it to a minimal point through the stock diversification process. This diversification is carried out by compiling several selected stocks into a portfolio. In other words, investors can invest in a group of shares with a certain proportion, so that the risk of loss on one stock can be covered by profits on other shares. In forming a portfolio, investors always want to maximize the expected return with a certain level of risk that they are willing to bear, or look for a portfolio that offers the lowest risk with a certain level of return. This characteristic of a portfolio is referred to as an efficient portfolio. A portfolio is said to be efficient if the portfolio when compared to other portfolios has the greatest expected return with the same risk or provides the smallest risk with the same expected return. Each stock index will definitely experience price fluctuations due to demand and supply activities for shares in the capital market. Stock price fluctuations in the market are a risk of price uncertainty in determining investment policy. The price trend for the LQ45 Index has fluctuated for the 2012-2016 period, this is due to an element of risk in this investment in August 2013 and September 2015 which experienced a drastic decline. Even though the LQ45 Index shares are a group of stocks that have high market capitalization and have high liquidity, they cannot be separated from uncertainty about the level of return that investors will receive. So that investors still need to consider various uncertainties that may occur and anticipate them by conducting portfolio analysis.

Portfolio analysis is an identification of which securities will be selected and what proportion of funds will be invested in each of these securities. The selection of the number of securities is intended to reduce the risk borne. To select stocks that are included in the optimal portfolio, various analytical tools can be used, including the Single Index Model or Constant Correlation Model approach. Investment is a commitment to a certain amount of money or other resources to get big profits in the future (Bodie, 2008). The definition of investment in various literatures explains that investment is a form of commitment of funds with a definite amount to obtain an uncertain return in the future. Thus, there are two aspects inherent in an investment, namely the expected rate of return and the risk of not achieving the expected return. Shares (stock) can be defined as a sign of participation or ownership of a person or entity in a company or limited liability company (Fakruddin, 2012). Investors who purchase shares will automatically have ownership rights in the company that issued them. The number of shares purchased will determine the percentage of ownership of the investor. The greater the number of shares owned by an investor, the greater his rights over the company that issued the securities. Of course in the ownership of these rights there is a return advantage that will be received. Stocks are also known for their high risk, high return characteristics, meaning that stocks are securities that provide high profit opportunities but also have high risk potential.

*Return* shares can be interpreted as the level of profit obtained or expected from ownership in a certain period (Shook, 2002). There are two returns from stocks expected by investors, namely dividends and capital gains. Risk is the prospect of an operationally unfavorable outcome as a standard deviation. Risk is the magnitude of the deviation between the expected rate of return and the realized rate of return (Horne, 2005). There are several types of systematic risk from stocks that must be considered in making investment decisions, namely capital loss, not receiving dividends and the risk of the issuer being liquidated. JCI movement can be used as a basis for calculating market returns, market returns which guide investors in determining the optimal investment portfolio using the Single Index Model (Sunariya, 2006).





## **2.RESEARCH METHODS**

This research is a quantitative research that emphasizes measurable data through several hypothesis testing, classical assumption testing, analyzing the relationship between variables and drawing conclusions. The nature of this research is included in correlational research, namely research that has the aim of seeing whether there is a relationship between two or more variables and seeing how big the relationship is between the observed variables. This research is the establishment of an optimal portfolio of LQ45 index stocks using the Single Index Model and Constant Correlation Model and a comparison of its performance with the best mutual fund portfolio in 2016, namely Mandiri Investa Equity Asean 5 Plus.

#### **3.RESULTS AND DISCUSSION**

Based on the above research results, it can be concluded that based on the Sharpe Index, Treynor Index and Jensen Alpha measurement methods, the optimal portfolio formed by the Single Index Model method has lower performance than the optimal portfolio performance formed by the Constant Correlation Model. Based on the Sharpe Index and Jensen Alpha measurement methods, the optimal portfolio formed using the Single Index Model method has lower performance than the Mandiri Investa Equity Asean 5 Plus portfolio performance. Whereas the Treynor Index measurement method shows that the optimal portfolio formed by the Single Index Model method has a higher performance than the Mandiri Investa Equity Asean 5 Plus portfolio performance. Based on the Sharpe Index and Jensen Alpha measurement methods, the optimal portfolio formed using the Constant Correlation Model method has lower performance than the Mandiri Investa Equity Asean 5 Plus portfolio. Whereas the Treynor Index measurement methods shows that the optimal portfolio formed by the Constant Correlation Model method has a higher performance than the Mandiri Investa Equity Asean 5 Plus portfolio. Whereas the Treynor Index measurement method shows that the optimal portfolio formed by the Constant Correlation Model method has a higher performance than the Mandiri Investa Equity Asean 5 Plus portfolio formed using the Constant Correlation Model method has a higher performance than the Mandiri Investa Equity Asean 5 Plus portfolio performance.

#### **4.CONCLUSION**

Based on the results of the research above, it can be concluded that as for suggestions for practitioners, for investors who are more aware of investment risks to obtain certain investment returns, the Constant Correlation Model can be chosen as a method of forming a portfolio. For investors who wish to obtain maximum investment returns with certain investment risks, the Single Index Model can be chosen as a method for forming an investment portfolio when market conditions are stable and bullish.

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