

Comparative Analysis of Equity Fund, Fixed Income Mutual Fund, and Mixed Mutual Fund

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ABSTRACT

This study aims to find out and describe Stock Mutual Fund, Fix Income Mutual Fund, and Mixed Mutual Fund. This study use a quantitative descriptive approach to describe Mutual Fund's performance. The study population was the all of the Mutual Fund with the sample of 78 Mutual Fund listed on Otoritas Jasa Keuangan (OJK) in accordance with predetermined criteria. The result of this study indicates that Sharpe and Treynor Method can be implemented in analyzing the performance of Stock Mutual Fund, Fix Income Mutual Fund, and Mixed Mutual Fund. Sharpe and Treynor Method shows the same result (outperform) and support one another. Sharpe and Treynor Method classify the Mutual Funds in two categories, positive and negative. The comparative result between Mutual Fund performance and IHSG benchmark performance shows two different result, outperform and underperform.

Keywords: mutual funds, IHSG benchmark.

1. INTRODUCTION

In Indonesia, mutual fund emanate for the first time by the Indonesian government who build PT. Danareksa in 1976 and issued a mutual fund called Danareksa Sertificate. Then in 1995 the government made a law, UU no. 8 year 1995, regarding capital market which most of the part regulate mutual fund rules.

Mutual fund is a tool to collect funds from the investor, to be invested in securities by investment manager. Investment manager will manage the collected investment funds to be invested in securities such as money market, bonds, and stocks. Investing in mutual fund means that the investor will receive the yields from their mutual fund securities indirectly. Yields (such as dividend, bonds coupon, and deposit interest) are accumulated in mutual fund's net asset value (NAB) (www.bareksa.com/2015).

Investing in mutual fund has advantages such as, an investment manager who'll manage mutual fund well, the investment diversity which will reduce the investment risk, continuous transparency of the cost and securities information, and the low cost of mutual fund investment due to the heaps of the investor source which resulted in the ability to generate cost efficiency (www.indopremier.com/2016).

In spite of that mutual fund investment also has disadvantages such as market risk that happens when the price of an investment suddenly drop. This risk occurs from

the lack of investment knowledge on capital market therefore inducing the wrong choice on decision making. Investor must be able to comprehend the diversity of mutual fund that are offering a different types of potential profit and loss so that they are able to minimize the risk.

Risk Adjusted Return is a performance assessment technique that calculate return and risk. The method used in this technique is *Sharpe and Treynor*. According to Paranita, *et al.* (2015) "the first reason to use this method is that the *sharpe and treynor* are completing each other. The second is *sharpe method* produce a lower percentage for undiversified mutual fund portfolio, whereas it has a high percentage for treynor method. A good diversified portfolio will have the same rank in both method. Third, these method was based on *premium risk*, which means that both measures the deviance of mutual fund's average performance with free risk investment's average performance. So according to these reasons, *sharpe and treynor* ought to be performed together.

According to previous research conducted by Gratia and Mohammad Kholo (2013) titled *Performance Measurement Analysis on Mutual Fund with Sharpe and Treynor Method*, shows that the best performance using sharpe and treynor method is Makinta Mantap Mutual Fund. A research by Cana Paranita (2015) titled "Performance Investment Analysis of Equity fund using Sharpe and Treynor Method (Studies on Equity fund listed on Bapepam year 2010-2014)". The result of that research was that there were no mutual fund that are consistently outperforming, and only two of them had the best performance, which is Panin Dana Prima and Panin Dana Maksima.

The result from this research will give a conclusion about the performance of mutual funds so that it could be useful to the

investors as a consideration on their investment and for investment manager as an evaluation tool for their fund managing performance. This research can be used as a benchmark in choosing the best mutual fund for a beginner investor or an experienced capital market investor who want to jump into equity fund.

2. LITERATURE REVIEW

1. Investment

According to Bodie, *et al.*, (2014:1) investment is the current commitment of money or any other resources with hope to gain profit in the future. According to Jogiyanto (2014:5) investment is a delay of current consumption to be used in an efficient production for a certain period of time. Investment definition as written in Big Indonesian Dictionary is investing money on a company or project to gain profits. So investment can be concluded as a current commitment of a delayed consumption to be used in a certain period of time to gain profits in the future.

Generally investment divided in two, a real investment (e.g. building, land, gold, and machine) and financial investment (e.g. stock, bond, commercial paper).

2. Capital Market

Tandelilin (2010:26) said, capital market is a meeting of a party that has excess funds with a party who needs funds by selling securities. Generally had more than one year time period like stocks and bonds.

3. Mutual Fund

According to Martalena and Malinda (2011:83), mutual fund is an investment alternative for investor especially small investor and beginner investor to calculate their investment's risks. Mutual fund designed to collect funds from people with excess funds that are willing and wanting to invest but has a limited time and knowledge. Mutual funds are expected to increase the role of local investors to invest in Indonesia's capital market.

Types of Mutual Fund:

- Based on shape, corporate type and contractual type
- Based on the nature, closed end fund and open end fund
- Based on the investment purpose, growth fund, income fund, and safety fund
- Based on investment portfolio, money market fund, fixed income fund, equity fund, mixed fund.

4. Mutual Fund Performance Assessment

Mutual fund performance is a measure to determine the mutual fund's capability to achieve return and risk from the portfolio. It was done to analyze the performance's growth from the mutual fund that has been managed in a certain period of time.

5. Sharpe Method

Sharpe method or Reward to Variability Ratio is calculating risk prime for every risk unit on the portfolio (Tandelilin 2010:494). The purpose is to determine achievable additional investment returns for every risk unit taken. This method use total risk calculation. The downside of this method is using assumption based on capital market line, therefore this method begin with an assumption that every funds are efficient. Sharpe method formula according to Tandelilin (2010:494) is,

$$\frac{SP - R_f}{\sigma_{TR}}$$

SP = sharpe portfolio index

RP = average return

R_f = average free risk return

= standard deviation return

Sharpe method is used to rank portfolios based on their performance. According to Tandelilin, the higher sharpe score is, the better the portfolio performance is. So a good mutual fund that are performing well and worth to invest is the one that has a high Sharpe score because it's capability of producing returns above total risk.

6. Treynor Method

Treynor method or Reward to Volatility Ratio according to Tandelilin (2010:497) is assuming that portfolios are diversified well so that the relevant risks are systematic. This method is used to determine achievable additional investment returns for every risk unit taken. This is a precise method because in fully diversified portfolio systematic risks are stated none. While the downcast of this method is when it was conducted on negative market then it will result in a misleading result. Therefore treynor method are best applied in a positive market so it can brings a proper result. The formula for treynor method (Tandelilin 2010:497) is:

$$\beta_P$$

TP = treynor portfolio index
 RP = average return
 Rf = average free risk return
 = beta portofolio

Treynor method is used to rank some portfolios based on their performances. According to Tandelilin, the bigger treynor score is, the better the portfolio performance is. So the criteria of a good and worthy of investment alternative is having a high treynor score.

3. RESEARCH METHOD

This research use a quantitative descriptive approach. This research only portrays independent variables therefore the use of the descriptive research. This research took place in BEI Corner at Economy and Business Faculty Brawijaya University Malang which located on Jl. MT. Haryono 165 Malang. The population of this research is the whole Mutual Fund, Fixed Income Mutual Fund, Equity Fund, and Mixed Funds that are active and listed on BEI (Indonesian Stock Market) with licence from OJK (Financial Services Authority) during a period from January 2014 until December 2017, in total 680 mutual fund. From that many populations, a few sample were chosen using a purposive sampling method according to prefixed criteria which resulted in 150 samples listed in this research.

4. RESEARCH RESULT AND DISCUSSION

The following are the result of mutual fund’s performance assessment using Sharpe and Treynor method in 2014, 2015, 2016, and 2017:

4.1. Fixed Income Mutual Fund

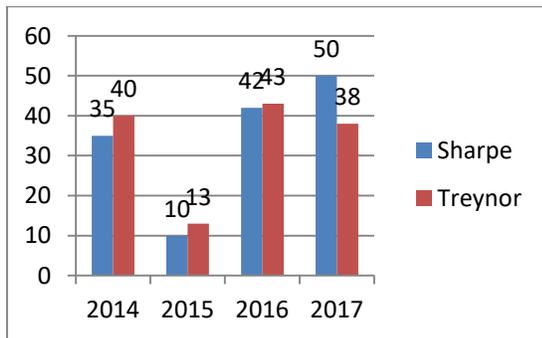


Figure 1. Positive Fixed Income Mutual Fund Performance using sharpe and treynor method

Based on the graphic above, on 2014 , by using sharpee method there are 35 mutual funds with positive result, and by using treynor method there are 40 mutual fund with positive result. On 2015, there are 10 mutual funds with positive result by using sharpe method, and there are 13 mutual funds with positive results by using treynor method. On 2016, there are 42 mutual funds with positive results by using sharpe method, and there are 43 mutual funds with positive results by using treynor method. On 2017, there are 50 mutual funds with positive result by using sharpe method, and there are 38 mutual funds with positive results by using treynor method.

After the calculation and ranking by sharpe and treynor method, the next is to compare fixed income mutual fund with IHSB benchmark to determine whether its outperform or underperform, so the annual best result can be achieved from all the sample.

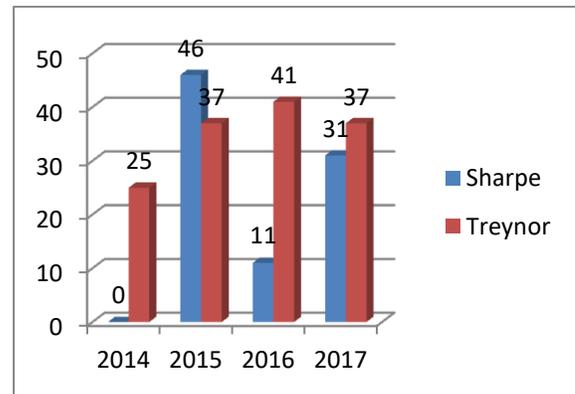


Figure 2 Performance of Fixed Income Mutual Funds that Outperform in the Year 2014, 2015, 2016, and 2017

Based figure 2, on 2014, there are no outperformed mutual fund using sharpe method and there are 25 outperform mutual fund using treynor method. On 2015, there are 46 outperform mutual fund using sharpe method and 37 outperform mutual fund using treynor method. On 2016, there are 11 outperform mutual fund using sharpe method and 41 outperform mutual fund using treynor method. On 2017, there are 31 outperform mutual fund using sharpe method and 37 outperform mutual fund using treynor method.

4.2. Mixed Mutual Fund

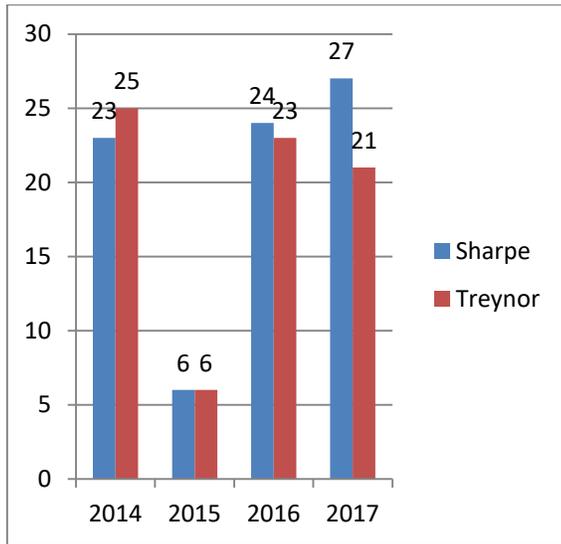


Figure 3. Positive Mixed Mutual Fund Performance with Sharpe and Treynor Method in 2014, 2015, 2016, 2017

Based on the figure 3, in 2014, there are 23 mixed mutual fund with positive result using sharpe method and 25 mixed mutual fund with positive result using treynor method. In 2015, there are 6 mixed mutual fund with positive result using sharpe method and 6 mixed mutual fund with positive result using treynor method. In 2016, there are 24 mixed mutual funds with positive results using sharpe method and 23 mixed mutual funds with positive results using treynor method. In 2017, there are 27 mixed mutual funds with positive results using sharpe method and 21 mixed mutual funds with positive results using treynor method.

After the calculation and ranking by sharpe and treynor method, the next is to compare mixed mutual fund with IHSG benchmark to determine whether its outperform or underperform, so the annual best result can be achieved from all the sample.

Based on the figure 4, in 2014, there are 4 outperform mixed mutual funds using sharpe method and 18 outperform mixed mutual funds using treynor method. In 2015, there are 25 outperform mixed mutual fund using sharpe method and 21 outperform mutual funds using treynor method. In 2016, there are 7 outperform mixed mutual funds using sharpe method and 20 outperform mixed mutual fund using treynor method. In 2017, there are 11 outperform mixed mutual fund using sharpe method and 17 outperform mixed mutual fund using treynor method.

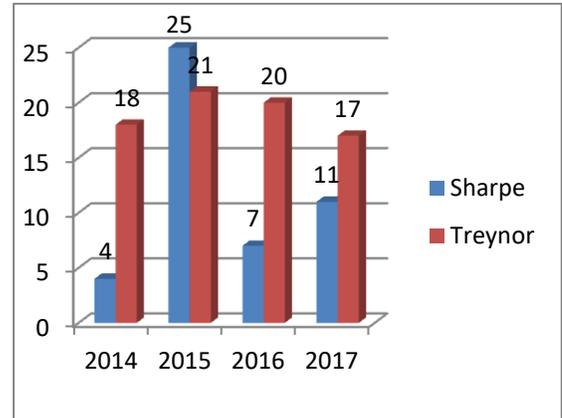


Figure 4 Outperform Mixed Mutual Fund Performance on 2014, 2015, 2016, 2017

4.3. Stock Mutual fund

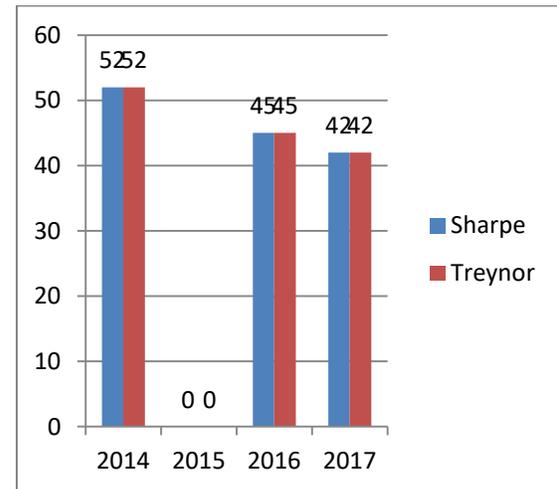


Figure 5. Positive Stock Mutual Fund Performance on 2014, 2015, 2016, 2017

Based on the figure 5, in 2014, there are 52 positive stock mutual fund using sharpe method and 52 positive stock mutual fund using treynor method. In 2015, there are 0 mutual funds using both sharpe and treynor method. In 2016, there are 45 positive stock mutual fund using sharpe method and 45 positive stock mutual funds using treynor method. In 2017, there are 42 positive stock mutual funds using sharpe method and 42 positive stock mutual funds using treynor method.

After the calculation and ranking by sharpe and treynor method, the next is to compare stock mutual fund with IHSG benchmark to determine whether its outperform or underperform, so the annual best result can be achieved from all the sample.

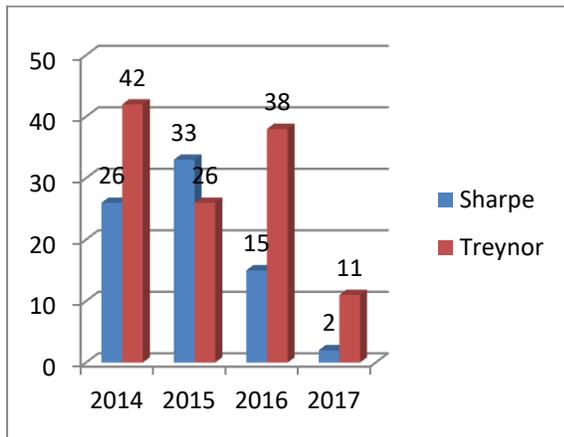


Figure 6 Outperform Stock Mutual Fund Performance on 2014, 2015, 2016, 2017

Based on the figure 6, in 2014, there are 26 outperform stock mutual fund using sharpe method and 42 outperform stock mutual funds using treynor method. In 2015, there are 33 outperform stock mutual funds using sharpe method and 26 outperform stock mutual funds using treynor method. In 2016, there are 15 outperform stock mutual funds using sharpe method and 38 outperform mutual funds using treynor method. In 2017, there are 2 outperform stock mutual funds using sharpe method and 11 outperform stock mutual funds using treynor method.

5. CONCLUSION

Investment that are worthy to invests are the ones that has a positive score using sharpe and treynor method, and outperforming according to IHSG benchmark. Based on the research's result, 2015 is not a good year to invest since there are no positive mutual funds and only has 3 outperform mutual funds.

In 2014, 2015, 2016, there are no positive score consecutively whether by sharpe or treynor method. But there are a consistent performance in top 10 rank that has the best performance in 2014, 2015, 2016, which is Hkam Ultima Ekuitas. Therefore Hkam Ultima Ekuitas Mutual Fund is the best choice as an investment alternative.

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