
EQUITY MUTUAL FUND PERFORMANCE ANALYSIS USING SHARPE AND TREYNOR INDICES 2012-2013

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ABSTRACT

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This research examines stock mutual fund performance compared with market performance (IHSG) by Sharpe and Treynor approaches. The research problems are whether there are significant difference between stock mutual fund performance and market performance (IHSG) in Indonesia Stock Exchange (IDX) by Sharpe approach, whether there are significant difference between stock mutual fund performance and market performance (IHSG) in Indonesia Stock Exchange (IDX) by Treynor approach, and which one of stock mutual fund has the best performance if measured using Sharpe and Treynor approach. The sample in this research are 31 stock mutual fund listed in Indonesia Stock Exchange year 2012 to 2013 from 11 Investment Management which have the biggest AUM. The analysis used in this research is Independent Sample T-Test by SPSS version 16 program package. The results show that there is a significant difference between stock mutual fund performance with market performance used Sharpe Index and there is a significant difference between stock mutual fund performance with market performance used Treynor Index. Stock mutual fund which has the best performance if measured uses Sharpe and Treynor approach is Trim Kapital Plus. The findings implied that investors should use Treynor approach to evaluate the performance stock mutual fund because it is consistence. Meanwhile, investment managers must reconsider stock portofolio and the use of Treynor approach in evaluating performance stock mutual fund.

KEYWORDS

Stock Mutual Fund Performance, IHSG, Sharpe and Treynor Method

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INTRODUCTION

Investment is one of the investment activities carried out by the community in order to obtain returns in the future (Rosyida & Mawardi, 2015). Investments are made using two components of assets, namely real assets and financial assets. Real assets include gold, property, and land, while financial assets include money market instruments, stocks, bonds, and mutual funds. Investments in financial assets are made in the money market and capital markets (Masruroh, 2014).

The money market or also called the foreign exchange market consists of Bank Indonesia certificates, money market securities, and certificates of deposit (Widyatsari, 2014). Capital markets according to Indonesian Law No. 8 of 1995 on capital markets are "activities related to public offering and securities trading, public companies relating to published securities, as well as institutions and professions related to securities". Thus the capital market is a meeting place for sellers and buyers who make transactions regarding long-term financial instruments (Faozan, 2013).

One of the components of the capital market is mutual funds (Hendrajaya, Wahyudi, & Sufian, 2014). Mutual funds according to Law No. 8 of 1995 Article 1 paragraph 27 which is meant by mutual funds is "a container used to collect funds from the financier community to be further invested in the securities portfolio by investment managers". Based on this, it is clear that investors entrust the money to the investment manager as the manager of the fund to be invested well in the capital market. An investment manager is a party whose business activities manage a portfolio of securities for customers or manage a collective investment portfolio for a group of customers, except insurance companies, pension funds, and banks that conduct their own business activities based on applicable laws and regulations (Prananingtyas, Mahmudah, & Widiati, 2017). Fund managers offer a wide range of mutual funds (Farid, 2015). Based on the category of instruments, mutual funds in Indonesia are divided into four, namely money market mutual funds, fixed income mutual funds, mixed mutual funds, and stock mutual funds (Santosa & Sjam, 2012).

Mutual funds were introduced in Indonesia on September 7, 1995. Although still relatively new, this instrument is growing rapidly. Based on BAPEPAM data at the end of December 2004, there were 246 mutual funds. In 1996, there were only 25 mutual funds established. In line with the growth in the number of mutual funds, the total managed funds (NAV) of mutual funds also increased significantly from only Rp. 2.78 trillion in 1996 to Rp. 104 trillion at the end of 2004 or grew by 3,639.64%.

Mutual funds do offer returns so many people are interested in investing in mutual funds. But mutual funds are not chosen carelessly, because some consideration is needed in choosing mutual funds (Setiantp, 2016). In Indonesia, mutual fund buying and selling has entered the online system. Bareksa.com is one of the integrated online mutual fund marketplaces in Indonesia under the auspices of PT Bareksa Investment Portal. There are six things that must be considered before buying mutual funds according to Edyanto Kisman on the website of the Capital Market Supervisory Agency which is now the Financial Services Authority (OJK), namely the credibility of the Investment Manager, the amount of funds managed by the Investment Manager, investment team profile, and performance of mutual fund products in 3 years up to 5 years, mutual fund prospectus, and flexibility of placement, withdrawal, ease of information, and fees charged to investors. Mutual funds are not only seen from the expected rate of return but also from the level of risk of the mutual fund. To measure the comparison between risk and return

levels, three types of indices are used, namely the Sharpe index, Treynor index, and Jensen index (Tuerah, 2013). These three indices are also known as Risk Adjusted Performance, these three indices have included return and risk factors in their calculations.

The Sharpe Index is a measure of portfolio performance developed (Darmayanti, Suryantini, Rahyuda, & Dewi, 2018). Measurements with the Sharpe index are based on the so-called "Risk Premium" risk premium. Risk Premium is the difference (difference) between the average performance produced by mutual funds and the average performance of risk-free assets. The Treynor Index is a measure of portfolio performance developed (Nurlaeli & Artati, 2020). Treynor measurements are basically no different from Sharpe's measurements, only that acting as a divisor is beta (β) which is a systematic risk or market risk. The Jensen index is similar to the Treynor index, Jensen uses the beta factor (β) in measuring the investment performance of a portfolio based on the development of the Capital Asset Pricing Model (CAPM). Jensen Index assesses performance above market performance in accordance with the risks it has.

According to the Editorial Financial Planner Team Vivanews.com, each type of mutual fund invests differently. Money market mutual funds whose portfolios are invested in money market instruments such as SBI. 80% of fixed income mutual funds are invested in fixed income investment products, especially bonds, the remaining 20% is invested in money market instruments (SBI, SUN) or bank products such as savings and deposits. Mixed mutual funds with roughly the same investment allocation, which is 50%:50%. Stock mutual funds are mostly or nearly 80% in the form of shares, and the rest is put into fixed income instruments. Each type of mutual fund also has a different performance judging from the net asset value of each type of mutual fund (Nandari, 2017).

In previous research, (Prasetyo & Safitri, 2014) calculations of the performance of stock mutual funds with market performance (JCI) using sharpe and treynor methods resulted in the performance of Panin Dana Maksima of -0.62306 which outperformed market performance (JCI) in sharpe method. which only gets a performance result of -0.94806, in the Treynor method also seen the performance of Panin Dana Maksima of -0.03468.

According to some research that used, Treynor and Jensen index in calculating the performance of stock mutual funds, of the 17 stock mutual funds there are two stock mutual funds that have a return above average, namely Phinisi mutual funds and Schroder (Darmayanti et al., 2018).

Research by (Ardi, 2015) shows that the highest performance of stock mutual funds calculated using Sharpe index was Manulife in 2006 and the lowest was Arjuna in 2006. Meanwhile the highest performance calculated using the Treynor index was Arjuna in 2005 and 2004.

Previous research mentioned before, in order to update the research, the authors used the research year from January 2012 to December 2013 and the authors also took special measures to determine the Investment Manager. Only eleven Investment Managers were included. In which they are those with the largest AUM. The author only calculates the performance of stock mutual funds because they are mutual funds with the highest returns and risk. Given the benefits that can be taken from information regarding mutual fund returns, then the author is interested in doing this research. The research aims to analyze the performance of stock mutual funds using Sharpe and Treynor indices from 2012 to 2013.

RESEARCH METHOD

This research is descriptive quantitative. Descriptive research seeks to obtain a complete and accurate description of a situation, while quantitative research is a scientific

approach to managerial and economic decision making. This approach begins with data, processing, and manipulating raw data into useful information (Kuncoro, 2007). This research aims to determine the performance of stock mutual funds owned by 11 Investment Manager Companies with the highest AUM, namely PT. Schroders Investment Management Indonesia, PT. BNP Paribas Investment Partners, PT. Mandiri Investment Management, PT. Bahana TCW Investment Management, PT. Manulife Asset

Management Indonesia, PT. Panin Asset Management, PT. Batavia Prosperindo Asset Management, PT. Danareksa Investment Management, PT. Sinarmas Asset Management, PT. First State Investment Indonesia, and PT. Trimegah Asset Management with JCI as its benchmark.

The variables used in this study are mutual fund returns, benchmark returns, risk free, Sharpe method and Treynor method. The data collection method used is documentation, because it relates to the type of data which is secondary data. The sampling technique used in this research is quantitative by calculating the available data.

RESULT AND DISCUSSION

A. Description of Research Object

This section describes the analysis of research data on the comparison of the performance of equity mutual funds with market performance through the Sharpe and Treynor indices. The object of this research is a mutual fund in the form of a Collective Investment Contract (CIC) which is an open-ended mutual fund in equity mutual funds that have met the criteria started in this research. After the criteria were determined as research requirements, 31 equity mutual funds were obtained. The mutual funds that are the object of this research are registered with Bapepam in the period January 2012-December 2013 and routinely inform the NAV per unit on the Bapepam website.

1. Variable Data Description

This section describes the descriptive data of the object under study. The descriptive data presented in this study includes research variable data, namely the performance of equity mutual funds and market performance using the Sharpe and Treynor indices.

2. Description of Equity Mutual Fund Performance

This study aims to test whether equity mutual funds are able to provide better performance than market performance. The performance of the stock mutual funds used in this study uses the Sharpe and Treynor indices. The period of this research is January 2012 to December 2013 and uses end-of-month mutual fund data. There are 31 mutual funds used in this study, consisting of 11 investment manager companies that have high AUM.

3. Market Performance Description

Market performance in this study is measured using a benchmark, namely the JCI (Joint Stock Price Index), while for risk-free returns using SBI interest rate data (Bank Indonesia Certificate). The following is the JCI and SBI interest rates per month.

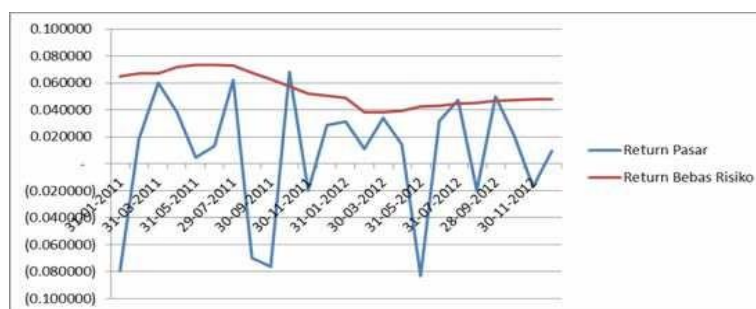


Figure 1: Changes in Market Return and Risk Free January 2012-December 2013
Source: processed data

During the research period, from January 2012 to December 2013, market returns fluctuated. Meanwhile, risk free tended to increase in May 2012, then fell quite a bit in February 2013, and increased slightly in the middle of 2013. Based on Figures 2 and 3, when expressed in descriptive statistics, the descriptive statistical values are obtained as follows.

Table 1 Descriptive Statistics of Equity, Market, and Risk Free Mutual Fund Return

	N	Minimum	Maximum	Mean	Std. Deviation
Mutual Fund Return	24	-.094272	.083902	.00538266	.050144646
Market Return	24	-0.83217	.068135	.00740988	.045388289
Risk Free	24	.038229	.073632	.05466285	.012360521
Valid N	24				

Source: Primary data processed

In table 1, it can be seen that the average return from equity mutual funds is 0.00538266 per month, while the stock market return (JCI) is 0.00740988 per month. So it can be said that the average return of stock mutual funds is smaller than the average market return. This study took 31 mutual funds during the period January 2012 to December 2013. The standard deviation for equity mutual funds was 0.050144646, while the market standard deviation (JCI) was 0.045388289. While the risk free value obtained an average of 0.05466285 with a standard deviation of 0.012360521.

B. Data Analysis

The data analysis in this study aims to determine the comparison of the performance of equity mutual funds with market performance (JCI) using the Sharpe and Treynor indexes, to answer the hypotheses proposed, among others:

- a) Comparative analysis of stock mutual fund performance with market performance (JCI) using the Sharpe and Treynor indexes
- b) Normality test using Kolmogorov Smirnov test (K-S).
- c) Hypothesis testing.

1. Equity Mutual Fund Performance Analysis with Market Performance

Table 2 Differences in Equity Mutual Fund Performance Calculation with Market Performance January 2012 - December 2013

No	Nama Reksa Dana Saham	Indeks Sharpe	Indeks Treynor	Return Pasar
1	Schroder 90 Plus Equity Fund	-0.936081	-0.042485	0.007410
2	Schroder Dana Istimewa	-0.926765	-0.042285	0.007410
3	Schroder Dana Prestasi	-0.935912	-0.042514	0.007410
4	Schroder Dana Prestasi Plus	-1.056002	-0.047560	0.007410
5	Schroder Indo Equity Fund	-1.029974	-0.046830	0.007410
6	BNP Paribas Solaris	-0.863400	-0.039835	0.007410
7	BNP Paribas Infrastruktur Plus	-0.956272	-0.043526	0.007410
8	BNP Paribas Ekuitas	-0.951542	-0.042810	0.007410
9	BNP Paribas Pesona	-1.009256	-0.045249	0.007410
10	BNP Paribas Maxi Saham	-1.034792	-0.046818	0.007410

11	Mandiri Investa Atraktif	-1.047292	-0.047219	0.007410
12	Mandiri Investa UGM Endowment Plus	-1.138666	-0.051783	0.007410

13	Bahana Dana Prima	-1.005796	-0.045175	0.007410
14	RD Dana Ekuitas Andalan	-1.084496	-0.049234	0.007410
15	RD Dana Ekuitas Prima	-0.894568	-0.041086	0.007410
16	RD Manulife Saham Andalan	-0.987627	-0.044998	0.007410
17	RD Manulife Dana Saham	-1.085149	-0.049031	0.007410
18	Panin Dana Maxima	-0.965882	-0.045302	0.007410
19	Panin Dana Prima	-1.019022	-0.048140	0.007410
20	Batavia Dana Saham	-1.035923	-0.046805	0.007410
21	Batavia Dana Saham Optimal	-0.915258	-0.041687	0.007410
22	RD Danareksa Mawar Fokus 10	-1.188473	-0.055977	0.007410
23	RD Danareksa Mawar	-1.118804	-0.052355	0.007410
24	RD Danareksa Mawar Agresif	-1.112396	-0.051314	0.007410
25	Sinarmas Danamas Saham	-1.031257	-0.050117	0.007410
26	First State Indoequity Dividend Yield Fund	-1.005526	-0.045183	0.007410
27	First State Indoequity Peka Fund	-0.944574	-0.042460	0.007410
28	First State Indoequity Sectoral Fund	-1.002072	-0.045075	0.007410
29	First State Indoequity Value Select Fund	-0.970786	-0.043805	0.007410
30	Trim Kapital	-0.951889	-0.044267	0.007410
31	Trim Kapital Plus	-0.694493	-0.032540	0.007410

Source: Primary data processed

Calculation of individual mutual fund performance is done using the Sharpe and Treynor method. The calculation of the performance of this mutual fund uses mutual fund data for the period January 2012 to December 2013. The mutual fund that has the highest return above the market return using the Sharpe index is Trim Kapital Plus of -0.694493 and the lowest is RD Danareksa Mawar Fokus 10 of -1.188473. Meanwhile, the mutual funds that have the highest return using the Treynor index are Trim Kapital Plus -0.032540 and the lowest is RD Danareksa Mawar Fokus 10 of -0.055977, but all of the mutual funds in the sample perform below market returns when calculated using the index. Sharpe and Treynor. The ranking of each index is as follows:

Table 3 Rating of Equity Mutual Funds Using the Sharpe Index

No	Name of Mutual Fund	Shares Sharpe
1	Trim Kapital Plus	-0.694493
2	BNP Paribas Solaris	-0.863400
3	RD Dana Ekuitas Prima	-0.894568
4	Batavia Dana Saham Optimal	-0.915258
5	Schroder Dana Istimewa	-0.926765
6	Schroder Dana Prestasi	-0.935912
7	Schroder 90 Plus Equity Fund	-0.936081
8	First State Indoequity Peka Fund	-0.944574
9	BNP Paribas Ekuitas	-0.951542
10	Trim Kapital	-0.951889

11	BNP Paribas Infrastruktur Plus	-0.956272
12	Panin Dana Maxima	-0.965882
13	First State Indoequity Value Select Fund	-0.970786
14	RD Manulife Saham Andalan	-0.987627
15	First State Indoequity Sectoral Fund	-1.002072
16	First State Indoequity Dividend Yield Fund	-1.005526
17	Bahana Dana Prima	-1.005796
18	BNP Paribas Pesona	-1.009256
19	Panin Dana Prima	-1.019022
20	Schroder Indo Equity Fund	-1.029974
21	Sinarmas Danamas Saham	-1.031257
22	BNP Paribas Maxi Saham	-1.034792
23	Batavia Dana Saham	-1.035923
24	Mandiri Investa Atraktif	-1.047292
25	Schroder Dana Prestasi Plus	-1.056002
26	RD Dana Ekuitas Andalan	-1.084496
27	RD Manulife Dana Saham	-1.085149
28	RD Danareksa Mawar Agresif	-1.112396
29	RD Danareksa Mawar	-1.118804
30	Mandiri Investa UGM Endowment Plus	-1.138666
31	RD Danareksa Mawar Fokus 10	-1.188473

Source: Primary data processed

A portfolio that has a high Sharpe value will illustrate that the portfolio has good performance, meaning that the higher the Sharpe value, the better the performance. The market performance is 0.007410, meaning that Trim Kapital is said to be underperforming because the Sharpe index value is lower than the market performance.

Table 4 Rating of Equity Mutual Funds Using the Treynor Index

No	Share Mutual Fund Name	Indeks Treynor
1	Trim Kapital Plus	-0.032540
2	BNP Paribas Solaris	-0.039835
3	RD Dana Ekuitas Prima	-0.041086
4	Batavia Dana Saham Optimal	-0.041687
5	Schroder Dana Istimewa	-0.042285
6	First State Indoequity Peka Fund	-0.042460
7	Schroder 90 Plus Equity Fund	-0.042485
8	Schroder Dana Prestasi	-0.042514
9	BNP Paribas Ekuitas	-0.042810
10	BNP Paribas Infrastruktur Plus	-0.043526
11	First State Indoequity Value Select Fund	-0.043805
12	Trim Kapital	-0.044267
13	RD Manulife Saham Andalan	-0.044998
14	First State Indoequity Sectoral Fund	-0.045075
15	Bahana Dana Prima	-0.045175

16	First State Indoequity Dividend Yield Fund	-0.045183
17	BNP Paribas Pesona	-0.045249
18	Panin Dana Maxima	-0.045302
19	Batavia Dana Saham	-0.046805
20	BNP Paribas Maxi Saham	-0.046818
21	Schroder Indo Equity Fund	-0.046830
22	Mandiri Investa Atraktif	-0.047219
23	Schroder Dana Prestasi Plus	-0.047560
24	Panin Dana Prima	-0.048140
25	RD Manulife Dana Saham	-0.049031
26	RD Dana Ekuitas Andalan	-0.049234
27	Sinarmas Danamas Saham	-0.050117
28	RD Danareksa Mawar Agresif	-0.051314
29	Mandiri Investa UGM Endowment Plus	-0.051783
30	RD Danareksa Mawar	-0.052355
31	RD Danareksa Mawar Fokus 10	-0.055977
Source:		Primary data processed

As with the Sharpe index, a high value of the Treynor index means that it has good performance while on the other hand, low performance indicates poor performance. Based on the table above, the highest performance of mutual funds based on the Treynor index is Trim Kapital Plus with a Treynor value of -0.032540 while the market performance is 0.007410, meaning that Trim Kapital is said to be underperforming because the Treynor index value is lower than the market performance.

2. Normality Test

The normality test is intended to show that the sample data comes from a normally distributed population.

Table 5 Normality Test for Sharpe . Index

		Indeks_Sharpe
N		31
Normal Parameters ^a		
	Mean	-.99677242
	Std. Deviation	.093362151
Most Extreme Differences		
	Absolute	.098
	Positive	.098
	Negative	-.079
Kolmogorov-Smirnov Z		.544
Asymp. Sig. (2-tailed)		.929
a.	Test distribution is	Normal

Table 6 Normality Test for Treynor Index

		Indeks_Treynor
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N	31
Normal Parameters ^a	
Mean	-.04559565
Std. Deviation	.004415072
Most Extreme Differences	
Absolute	.107
Positive	.098
Negative	-.107
Kolmogorov-Smirnov Z	.597
Asymp. Sig. (2-tailed)	.869

a. Test distribution is Normal.

Based on tables 9 and 10 above, it can be seen that Asymp. Sig. (2-tailed) of the two mutual fund performance measurements, both Sharpe and Treynor methods, are greater than 0.05. So that it can be concluded that the data are normally distributed. After the data is known to be normally distributed, the next step is to test the hypothesis with an independent sample t-test.

3. Hypothesis Testing

This test aims to prove whether there is a significant difference between stock performance and market performance using the Sharpe index. The test results are as follows:

Table 7 Sharpe Index Independent Sample Test with Market Return

Statistics	Average	Std Deviation	T	Sig. (2-tailed)
Mutual performance	-.99677242	.093362151	-59.886	.000
Market Performance	.00741000	.000000000		

Source: Primary data processed

The test results between the performance of equity mutual funds and market performance based on the Sharpe index show that the value of sig. (2-tailed) worth 0.000, which means $\text{sig} < 0.05$, this indicates that H_{a1} is accepted or H_{o1} is rejected, which indicates that there is a difference between stock mutual fund returns and market returns. When viewed from the average performance, it can be seen that the average performance of equity mutual funds is smaller than the market performance.

Table 8 Independent Sample Test of Treynor Index with Market Return

Statistics	Average	Beta	T	Sig. (2-tailed)
Mutual performance	-.04559565	.004415072	-66.844	.000
Market Performance	.00741000	.000000000		

Source: Primary data processed

From the test between the performance of equity mutual funds and market performance based on the Treynor index, it shows that the value of sig. (2-tailed) worth 0.000, which means $\text{sig} < 0.05$, this indicates that H_{a2} is accepted or H_{o2} is rejected. This means that there is a difference between stock mutual fund returns and market returns. Based on the Treynor index, it was found that the JCI's performance was much higher than the average performance of equity mutual funds. This condition indicates that

investment managers have not been optimal in managing their portfolios.

4. Interpretation of Results

The results of this study indicate that there is a significant difference between the performance of stock mutual funds and market performance using the Sharpe index. This is based on the test results which show that the Sharpe index shows a sig value. (2-tailed) worth 0.000, which means $\text{sig} < 0.05$. The test between the performance of equity mutual funds and market performance based on the Treynor index shows that the value of sig. (2-tailed) worth 0.000, which means $\text{sig} < 0.05$ which means that there is a significant difference between mutual and stock performance and market performance using the Treynor index.

The reason for this equation of results can occur because the results of the Sharpe and Treynor indices both produce returns that are lower than their market performance. Sharpe index whose divisor uses total risk (standard deviation), such as business risk, liquidity risk, interest rate risk, market risk, purchasing power risk and currency risk. Meanwhile the Treynor index uses systematic risk as its divisor (beta), such as market risk, purchasing power risk and currency risk. Although the comparisons are different, the results of the stock mutual funds tested are below the market performance, using both the Sharpe and Treynor indexes. This shows that investment managers have not optimally managed their portfolios.

C. Discussion of Research Results

1. Comparative Analysis of Equity Mutual Fund Performance with Market Performance (JCI) using Sharpe Index

To find out the difference in the performance of equity mutual funds with the JCI using the Sharpe index, the hypotheses that have been prepared are:

H_0 = There is no significant difference between stock mutual fund returns and market returns.

H_a = There is a significant difference between stock mutual fund returns and market returns. Decision-making:

H_0 is accepted if $\text{sig } t > 0.05$ means that there is no difference between stock mutual fund returns and market returns.

H_0 is rejected if $\text{sig } t < 0.05$, meaning that there is a significant difference between stock mutual fund returns and market returns.

The result of the calculation using SPSS 16 is the sig value (2-tailed) worth 0.000, which means that $\text{sig} < 0.05$. So it can be concluded that there is a difference in the performance of stock mutual funds with market performance using the Sharpe method. Similar to the results of calculations with the Treynor index which shows that the performance of the JCI and equity mutual funds is different, the Sharpe index shows that the performance of the JCI and share mutual funds is different. This study supports the research of Ambarwati (2007) which states that there is a significant difference between the performance of equity mutual funds and market performance using the Sharpe method, However this research does not support the research of Jeffry and Ervita (2014) and Junanda (2004) which results that there is no significant difference. There is a significant relationship between stock mutual fund performance and market performance using the Sharpe method.

2. Comparative Analysis of Equity Mutual Fund Performance with Market Performance (JCI) using Treynor Index

To find out the difference in the performance of equity mutual funds with the JCI using the Treynor index, the hypotheses that have been prepared are:

Ho2 = There is no significant difference between stock mutual fund returns and market returns.

Ha2 = There is a significant difference between stock mutual fund returns and market returns. Decision-making:

Ho2 is accepted if $\text{sig } t > 0.05$, it means that there is no difference between stock mutual fund returns and market returns.

Ho2 is rejected if $\text{sig } t < 0.05$, it means that there is a significant difference between stock mutual fund returns and market returns.

The result of the calculation using SPSS 16 is the value (2-tailed) worth 0.000, which means $\text{sig } < 0.05$. Hence it can be concluded that there is a difference in the performance of equity funds with market performance using the Treynor method. From the average performance, it can be seen that equity funds are lower than market performance. This happens because the preparation of the portfolio is not optimal. Stock changes are very dynamic and change quickly, even stocks that perform well can change quickly. This change is not accompanied by mutual fund managers in determining their portfolios, this resulted in the performance of equity funds being lower than market performance. This study supports the research of Junanda (2004) which states that there is a significant difference between the performance of equity funds and market performance using the Treynor method.

Although the results of SPSS 16 mutual fund performance using the Sharpe and Treynor indices have similar results indicating that there is a significant difference between the performance of equity funds and market performance using the Sharpe and Treynor method, the results of this study conclude that using the Treynor index is more consistent. This is because the Treynor index uses systematic risk, namely beta, while the Sharpe index uses total risk, namely standard deviation. According to JP Morgan analyst Dheeraj Vaidya, if $\text{beta} = 1$, then the stock has the same risk as the market. Therefore if the market goes up 1%, then the stock price will also rise 1%. If $\text{beta} > 1$, it means that the level of risk is higher compared to the market. For example if the market goes up by 1%, the stock price will go up by 2%. If $\text{beta} > 0$ and $\text{beta} < 1$, then the stock price will move with the market as a whole, but the stock price will be less risky, for example if the overall market goes up 1%, the stock price will increase 0.5%. Therefore, investment managers should use the Treynor index in measuring portfolio performance.

CONCLUSION

Based on the results of research and discussion, there are several conclusions to answer the research hypothesis, namely: there is a significant difference between the performance of equity funds and market performance using the Sharpe index. There is a significant difference between the performance of equity funds and market performance using the Treynor index. The highest mutual fund performance is calculated using the Sharpe and Treynor indexes, namely Trim Kapital Plus mutual funds, while the lowest mutual fund performance is calculated using the Sharpe and Treynor indexes, namely RD Danareksa Mawar Focus 10.

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