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Sharia Equity Fund Performance Analysis (Indonesia's Case Study)

*Bintang Andhyka
(University of Pancasila, Indonesia)
*Corresponding Author: *Bintang Andhyka*

Abstract: *This study aimed to determine whether the performance of syariah equity funds have performed better than the market as a comparator (JII) by using Sharpe and Treynor and to see if there are differences in the performance measurement results ranking syariah equity funds between methods Sharpe and Treynor methods. There were 11 syariah equity funds which are used as a sample of this study. The sampling method used was purposive sampling. This study uses Sharpe and Treynor methods. The type of data used is secondary data is data that NAB is a sample of January 2014 to December 2014 in the form of monthly data. The greater value of Sharpe and Treynor ratio of Syariah equity funds, the better the performance of Syariah equity funds. The results of the analysis using the Sharpe suggests that there are 2 (two) Syariah Equity Funds that have a good performance and are 9 (nine) Syariah Equity Funds have performed below JII performance. Analysis using Treynor shows that there are 9 (nine) Syariah Equity Funds that have performed well, which has a value of Treynor Ratio above syariah market index (JII) and there are 2 (two) Syariah Equity Funds that have performed under the JII performance. From all of 11 Syariah Equity Funds, there are only 1 (one) Syariah Equity Funds that is not changed either using the method of Sharpe and Treynor methods and there are 10 (ten) Syariah Equity Funds whose ranking changed using either the method of Sharpe and Treynor methods .*

Keywords: *Syariah Equity Funds, JII, Sharpe Methods, Treynor Methods*

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I. Introduction

Nowadays, there are various investment method either in the stock market or money market. previously, saving and deposit are the most favorite and wanted common finance instrument by the community. As long as the increasing of investment awareness in the community, the other finance instrument such as stock, bond , ORI, and another money market like Sertifikat Bank Indonesia (SBI) have already been observed by the community who want to be an investor. The increasing of Investment awareness has encouraged the community to invest. But this awareness is not followed by the risk level knowledge and return form those investments. Therefore, there is some hesitation for some potential investor to invest in Indonesia stock exchange (IDX). For beginner investor, Mutual fund is the most favorite investment instrument. Not only promising higher return, Mutual fund is also managed by experienced investment manager so that it can decrease risk failure in investment choice. Investor profile in Indonesia is predominantly Moslem. It makes investor start to choose sharia investment instrument from sharia bank from saving a deposit until sharia equity fund preference.

There are several tipes of sharia mutual fund in Indonesia , like sharia equity fund, fixed income sharia mutual fund, money market sharia equity fund, and Mix sharia mutual fund. Investor will prefer to invest in sharia mutual fund based on their risk preference. Highest risk in sharia equity fund is the same as conventional mutual fund, the lowest risk is in money market sharia mutual fund as well as conventional money market mutual fund. But the promised return is less than the other mutual fund. Lack of investor knowledge about risk and rate of return of mutual fund will caused difficulty to choose mutual fund instrument for their investment decision. They need a method to asses sharia mutual fund performance and to rank sharia mutual fund in order to help their investment decision. It encourages some researcher to do several research studying about mutual fund performance assessment in order to give reference for the investor who want to invest in sharia mutual fund instrument. It also gives reference in mutual fund performance which worth to be infested.

There are several methods which commonly used in evaluating mutual fund performance such as sharpe method, treynor method, and Jensen method. Hermeindito (2007) said that in common, mutual fund has better performance than the other investment instrument (market return or risk free interest rate). In Agus (2007) and Gratia (2013) research, they found that sharpe ratio method consist of 10 mutual fund stock with good performance and 3 mutual fund stock with poor performance. Return on mutual fund is the only thing to consider, the other one is its risk. Ratnawati and khairani (2012) has done research to study about 1) the differences between sharia mutual fund and conventional mutual fund performance (based on its return and

risk), 2) the differences between sharia and conventional mutual fund (based on sharpe ratio and treyor ration), 3) the differences between sharia and conventional mutual fund performance (based on Jensen alpha). This research result indicates that sharia and conventional mutual fund performance is different but not significant. Hasbi (2010) has done research to study about sharia mutual fund performance compared to sharia market ratio (JII) in Indonesia on 2009. Based on sharpe, jansen, and treynor ratio, this research indicates that sharia mutual fund return better than its market ratio (JII) and sharia mutual fund risk is lower than sharia market ratio risk (JII).

There are some argumentations about both conventional and sharia mutual fund performance from previous research in Indonesia. Because of that, this research is about **"The analysist of Sharia equity fund performance".** In this research, several methods are used to asses sharia equity fund performance such as sharpe and treynor. This research is also study about performance differences between sharia equity fund and sharia market ratio (JII). There are so many sharia and conventional mutual fund type in Indonesia. The unstable condition of the capital market nowadays, makes a difficulty to analyze whole mutual fund performance. Therefore, this research is only studying about the lasts year (2013) on sharia mutual fund performance because on that year there was no research about sharia mutual fund performance. Research object in this research is the active sharia equity fund until December 31st 2013. The data used for this research are Net Asset Value (NAV) of sharia equity fund from website http://ojk.go.id, *Jakarta Islamic Index* (JII) as a proxy of sharia market index and Bank of Indonesia Certificate (SBI) as a proxy of risk free investment obtained from www.idx.com.

This research objectives are (1) analyze whether sharia equity fund performance is better than market as comparison using sharpe method, (2) analyze whether sharia equity fund performance is better than market as comparison using Treynor method, (3) analyze the differences on research result rating between the assessment of sharia equity fundperformance using sharpe and treynor method. For the investor, this research can be used as consideration for taking investment decision on sharia equity fund. For the researcher, this research can be used as knowledge and experiences about sharia equity fund performance in Indonesia, For the readers, this research can be used as knowledge for investment and assessment about sharia equity fund performance in Indonesia and as references for the next researches.

II. Literature Review

According to constitution number 8 year 1995, chapter 1 verse 27, mutual fund is instrument to collect funding from community investor and to be invested on stock portfolio by investment manager (licensed by OJK). Cahyaningsih (2008) defined sharia mutual fund as sharia investment instrument which its activity is based on sharia principal. She represents religion law enforcement in every product, service, and business activities are forbidden from riba element (interest), maisir (gambling), and Gharar (betting). This make sharia mutual fund is difference from conventional mutual fund product, service and business activities. Sharia mutual fund will not be invested on stocks or bond from contradictive- Islamic- law companies such as alcoholic food or beverage company, pork, cigarettes, tobacco, conventional finance service, defense and armory, and immoral entertainment business. According to simforianus (2008), mutual fund is a company which infest its capital in diversified portfolio. Mutual fund company sell stock to investor and promising value added in dividend increasement, capital gain, Net Assets Value (NAV).

According to Cahyono (2002) in Ani (2007), the risk in mutual fund are: (1) Decreasing unit value risk, (2) Political and economic condition risk, (3) Liquidity Risk of Open End-Mutual Fund, (4) Default Risk, (5) Law and Regulation Risk. There are four types of mutual fund according to OJK (Otoritas Jasa Keuangan). In this case, it applies on conventional and sharia mutual fund : (1) Money Market Mutual Fund, is a mutual fund which invest 100% on money market stock exchange. Money market instrument is debt instrument with time period less than 1 year such as deposit, SBI, bond, and other debt instrument. Money market mutual fund is mutual fund with lowest risk but it has a limitation on potential return. Return on money market mutual fund commonly similar to deposit interest rate because most of its portfolio is consist of deposit. The advantages of this mutual fund is higher investment diversification and liquidity. The redemptions of fund can be done within a day after application and in higher interest rate than bank interest, (2) Fix Income Mutual fund, is a mutual fund which invest at least 80% from managed portfolio into debt instrument. Debt instrument commonly give return in interest such as deposit, SBI, bond, and other instrument. In Indonesia, the biggest proportion in the fix income mutual fund is bond instrument, (3) Stock Mutual Fund/Equity Mutual Fund, is a mutual fund which invested at least 80% from managed portfolio into stocks instrument. It is different from fix income exchange such as deposit and bond, investor is more oriented with interest income. In stock investment, investor will get higher return such as capital gain through stock prices growth. Beside capital gain, investor also can get other return such as dividend, (4) Mix mutual fund. Different from the other three mutual fund types, mix mutual fund can invest on bond, equity, and money market instrument with more flexible allocation proportion. Because of its flexibility, it need more information and analysis before deciding on a certain assets proportion of mix mutual fund.

Mutual Fund Performance assessment can be calculate based on 3 (three) method :
(1) Sharpe ratio, In sharpe method, mutual fund performance analyzed without considering its market and only based on its mutual fund portfolio deviation.

$$RVAR = \frac{TR_R - RB_R}{\sigma}$$

Where:

RVAR	: sharpe ratio value
TR_R	: the average of total return on mutual fund in certain sub-period
RB_R	: the average of risk-free investment returns in certain sub-period
σ	: mutual fund standard deviation in certain sub-periode

The analysis using sharpe method is based on risk premium. Risk premium is the difference between average mutual fund performance and average risk-free asset investment performance. In this case, the proxy of risk-free investment is Certificate of Bank Indonesia (SBI) (Achsien, 2003 in Cahyaningsih, 2008). RVAR value indicate mutual fund performance. Higher RVAR means better mutual fund performance (Hartono, 2010).
(2)Treynor ratio, In treynor method, mutual fund performance analyzed with considering its market fluctuation (hartono,2010).

$$RVOL = \frac{TR_R - RB_R}{\beta}$$

Where

RVOL	: Treynor ratio value
TR_R	: the average of mutual fund total return in certain sub-periode
RB_R	: the average of free risk investment returns in certain sub-period
β	: slope equation line from linear regression result

Treynor ratio is portfolio performance assessment which developed by Jack Treynor (1965). Treynor method is not too difference with Sharpe method. It only use beta (β) which is systematic risk or market risk, in this research, β is Jakarta Islamic Index (JII) that can be used as the proxy of systematic risk for sharia equity fund. (Achsien, 2003 in Cahyaningsih, 2008). According to Hartono (2010), RVOL value indicate mutual fund performance. Higher RVOL value makes better mutual fund performance.
(3) Jensen ratio ,this method used to assest investment manager performance, whether he is capable to give performance higher than market performance based on its risk.
(RD performance – RF performance) = Alfa + β x (RP performance – RF performance) Or
Alfa = (RD performance – RF Performance) – β x (RP Performance – RF Performance)
Where, Alfa = Jensen Value Intersection

Ratnawati and Khairani (2012) has been done research about 1) the differences between conventional and sharia mutual fund performance (based on its return and risk), 2) the differences between conventional and sharia mutual fund performance (based on Sharpe and Treynor ration), 3) the differences between conventional and sharia performance (based on Jensen Alpha). The result indicates that both sharia and conventional mutual fund performance is difference but not significant. Simforianus (2008) has been done research about stock mutual fund with raw return, Sharpe, Treynor, Jensen, and sortino method. The result show stock mutual fund ratings in Indonesia from superior to inferior ratings.

Gratia (2013) has been done research using sharpe and treynor method. Based on Sharpe method, she indicated that there were 5 (five) mutual fund which has good performance and 5 (five) mutual fund which has poor performance below IHSG performance. Based on Treynor method, there were 9 (nine) mutual fund which has good performance, which has treynor value above the stock market treynor value. There were one stock mutual fund performance which has performance under the IHSG performance. In 10 (ten) active mutual fund which invested in stock portfolio, there were 5 (five) active stock mutual fund which its rating was not changed either using sharpe or treynor method. There were 5 (five) active stock mutual fund which its rating was changed either using sharpe of treynor method.

Agus (2007) in Gratia (2013) research said that based on sharpe ratio, there were 10 (ten) active mutual fund stock with good performance and 3 (three) active stock mutual fund with poor performance. Not only mutual fund return which need to be considered but also its risk. Hasbi (2010) found that risk-adjusted performance (sharpe, treynor, and jansen) as return performance assessment and sharia mutual fund risk provide result that all the sharia mutual fund return and risk performance is better than its market return, in this case is JII (Jakarta Islamic Index). Sharpe method ratio used to assess how much investment return growth from every mutual fund risk unit. Sharpe ratio is calculated from the difference between average return of sharia equity fund with average return of Bank Indonesia Certificate (SBI) as free risk investment and then divided by standard

deviation as a proxy of risk. In the Agus (2007) in Gratia (2013) research, it was said that there were 10 (ten) active mutual fund with good performance and 3 (three) stock mutual fund with poor performance than its market using Sharpe Method. Treynor method determined by market fluctuation. Treynor method used to assess portfolio premium risk per risk systematically where beta (β) used as market risk. Hermeindito research (2007) said that generally sharia equity fund has better performance than market return or risk free investement as comparison. Performance assessment using sharpe and treynor method is a complement for each other because those ratio assessments provide different result and information. Eko (2009) said that undiversified mutual fund portfolio will have higher rating based on treynor method but it will have lower rating based on sharpe method. Well Diversified mutual fund portfolio will has the same rating using both treynor and sharpe method

III. Research Design

From the previous research and theories above, there is the hypothesis:
Hypothesis 1: sharia equity fund has better performance than its market based on Sharpe method
Hypothesis 2: sharia equity fund has better performance than its market performance based in Treynor Method.
Hyphothesis 3: there were differences in research result rating between sharia equity fund performance based on sharpe and treynor method.

The variables used in this research are sharia equity fund return, JII (Jakarta Islamic Index) return (benchmark), standard deviation of sharia equity fund return, risk free investment return, sharpe method, and treynor method.
The research operational variables that have been defined have the following definition:

1. Sharia equity fund return. Sharia equity fund return in certain period will indicate a performance measurement which obtained by the company from NAV (Net Assets Value) per unit data calculation. Mutual fund return is calculated with:

$$Return\ Rd = \frac{NAV_t - NAV_{t-1}}{NAV_{t-1}}$$

Where,
Return Rd = the average of mutual fund return in certain sub-period
NAVt = net assets value per unit in this month
NAVt-1 = net assets value per unit in previous month

2. JII (Jakarta Islamic index) return. JII (Jakarta Islamic index) is used as a measurement of market performance. JII return value calculated as follow:

$$Return\ JII = \frac{JII_t - JII_{t-1}}{JII_{t-1}}$$

Where,
Return JII = market performance (JII) in certain sub period
JIIt = Jakarta Islamic index (JII) in this month
JIIt-1 = Jakarta Islamic index (JII) in previous month

3. Standard deviation of sharia equity fund return. Standard deviation describe deviation from average return in sharia equity fund and market in certain period. The standard deviation of equity fund return can be calculated as following:

$$S = \sqrt{\frac{\Sigma(X - \overline{X})^2}{n-1}}$$

Where,
S = sample standard deviation
∑ = summary symbol
X = data value in the sample
X = sample average
n = total data

$$x = \frac{\Sigma\, x}{N}$$

X = sample average
∑ = summary symbol
X = data value in the sample
n = total data
∑X= summary from all X value from the sample

4. Risk free investment is investment with free risk. It is assumed with bank Indonesia certificate average interest level in certain period. Risk free investment can be obtained with:

$$Rrf = \frac{\Sigma\, SBI}{\Sigma\, period}$$

5. Sharpe method, is method to examine mutual fund performance based on how much additional investment returns are earned for each unit of risk taken. Sharpe method can be formulated as following;

$$RVAR = \frac{T_R - R_{BR}}{\sigma}$$

Where,
RVAR = sharpe ratio value
TR_R = the average of total mutual fund return in certain sub-period
RB_R = the average of free risk investment returns in certain sub-period
σ = mutual fund standard deviation in certain sub period

6. Treynor method. As well as sharpe method which use risk premium, treynor method use beta (β) which is fluctuation risk reacted with market risk. Treynor method can be formulated as following:

$$RVOL = \frac{TR_R - RB_R}{\beta}$$

Where,
RVOL = Treynor ratio value
TR_R = the average of total mutual fund return in certain sub-period
RB_R = the average of risk free investment returns in certain sub-period
β = slope of the equation of linear regression line

Population in this research are all conventional and sharia mutual fund which listed in OJK (Otoritas Jasa Keuangan) from January 2013 to December 2013. It will give description about mutual fund performance in Indonesia. From those population, there were sample for this research. Not all mutual fund is taken as this research sample. Sample in this research determined with purposive sampling technique. Purposive sampling technique is choosing sample with certain criteria. Its criteria are:

1. Active sharia equity fund until December 2013. Sharia equity fund which operated from January 2013 until December 2013 and listed in OJK (Otoritas Jasa Keuangan).
2. Based on the criteria for selecting predefined samples, there are only 11 (eleven) sharia equity fund samples in this research. Sample are on table 3.1

Table 3.1Sharia equity fundlist in 2013

No	Sharia Equity Fund
1	Panin Dana Syariah Saham
2	Batavia Dana Saham Syariah
3	Cipta Syariah Equity
4	Reksadana Lautan Dhana Saham Syariah
5	Mandiri Investa Ekuitas Syariah
6	Mandiri Investa Atraktif-Syariah
7	Reksadana Manulife Syariah Sektoral Amanah
8	Reksadana Pnm Ekuitas Syariah
9	Sucorinvest Sharia Equity Fund
10	Sam Sharia Equity Fund
11	Rd Trim Syariah Saham

Data which used in this research are secondary data which is monthly sharia equity fund net assets value (NAV) from official website OJK (Otoritas Jasa Keuangan), www.ojk.go.id from January 2013 until December 2013. Data about benchmark (Jakarta Islamic index) are obtained from www.idx.co.id. Data about bank Indonesia certificate interest rate are taken from Bank of Indonesia website, www.bi.go.id. There are also several data from some literature related with this research and concept needed. In this research, quantitative data analysis is used to analyzed the data sample using sharpe and treynor method. To achieve the objective, this research must use several phase of data analysis as following:

1. Performance assessment analysis using sharpe method

The step to do this analysis are:
a. Determine each return of sharia equity fund
b. Determine standard deviation of sharia equity fund return
c. Determine return of risk free investment (Bank Indonesia Certificate/SBI)
d. Calculate the performance using sharpe method

From those step, the order of sharpe ratio performance will be shorted. Higher sharpe ratio will make higher performance of the sharia equity fund.
e. Determine JII (benchmark) return using sharpe method
From this assessment, it will be averaged and determined sharpe ratio value to be compared with the average sharpe ratio of sharia equity fund.

2. Return analysis and performance assessments using Treynor method
The analysis step are:
a. Determine each sharia equity fund performance and risk free investment (SBI) performance
b. Determine beta
Regression between sharia equity fund return as dependent variable and JII return as independent variable.
c. Determine performance using treynor method
From those analysis, the order of treynor ratio performance will be shorted. Higher sharpe ratio will make higher performance of the sharia equity fund.
d. Determine JII return using treynor method
From this assessment, it will be averaged and determined treynor ratio value to be compared with the average of sharia stock mutual fund.
3. Performance assessments analysis

In order to determine sharia equity fund using sharpe method, standard value (benchmark) will be used as basis sharia stock market performance with assessment criteria as following:
a. Sharpe ratio value of Sharia equity fund is above the sharpe ratio value of sharia stock market, then the sharia equity fund is in a good performance.
b. Sharpe ratio value of Sharia equity fund is below the sharpe ratio value of sharia stock market, then the sharia equity fund is in a poor performance.
c. Sharpe ratio value of Sharia equity fund is similar with the sharpe ratio value of sharia stock market, then the sharia equity fund is in a similar performance with sharia stock market performance.

As well as sharpe method, treynor method use standard value (benchmark) as basis from sharia stock market performance with assessment criteria as following:
a. Treynor ratio value of Sharia equity fund is above the Treynor ratio value of sharia stock market, then the sharia equity fund is in a good performance.
b. Treynor ratio value of Sharia equity fund is below the Treynor ratio value of sharia stock market, then the sharia equity fund is in a poor performance.
c. Treynor ratio value of Sharia equity fund is similar with the treynor ratio value of sharia stock market, then the sharia equity fund is in a similar performance with sharia stock market performance.

Meanwhile, in order to determined sharia equity fund performance can be determined from calculated sharpe ratio value and treynor ratio value. Higher sharpe and treynor ratio value mean higher sharia equity fund performance.

IV. Research Finding

4.1 Result and discussion of hypothesis 1

After determined sharia stock mutual fund return, free risk investment (SBI) return, and standard deviation from sharia equity fund return, the performance of sharia equity fund can be determined using sharpe method as following:

Table 4.1 The Analysis of Sharia Equity Fund Performance Using Sharpe Method

		PANIN	BATAVIA	CIPTA	L.DHANA	M.INVESTA	M.ATRAKTIF	MANULIFE	PNM	SUCORINVEST	SAM	TRIM
BULAN	**SBI* (R_{BR})**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**
Januari												
Februari	5.75	7.31	8.56	4.66	2.59	0.44	6.44	6.81	5.43	10.52	9.81	2.06
Maret	5.75	3.73	3.59	5.93	0.96	-0.20	4.49	2.78	4.14	4.21	9.27	7.22
April	5.75	6.60	4.65	2.70	2.17	1.06	2.09	3.99	5.96	2.03	5.76	2.52
Mei	5.75	5.02	5.38	0.19	1.83	-0.04	3.12	2.32	5.11	2.03	6.99	-11.35
Juni	6.00	-6.73	-8.80	-5.01	-3.60	-0.88	-8.21	-4.43	-9.47	-8.07	-5.46	2.94
Juli	6.50	-9.99	-5.63	-6.29	-6.64	0.18	-7.74	-5.42	-6.54	-6.24	-5.91	6.33
Agustus	7.00	-11.91	-6.37	1.71	-6.33	-0.13	-11.51	-6.76	-4.26	-10.29	-8.68	-5.35
September	7.25	6.58	-0.73	-1.46	1.18	1.08	-0.38	-1.07	-0.19	2.57	0.39	6.35
Oktober	7.25	2.73	2.82	3.80	4.98	1.18	4.27	4.54	3.31	5.25	4.90	3.48
November	7.5	-8.93	-6.36	-4.20	-5.82	-0.97	-6.23	-6.36	-6.50	-6.84	-9.17	1.41
Desember	7.50	-0.56	0.88	-0.76	1.15	0.51	0.41	0.34	-1.60	0.69	-1.11	-0.52
R_{BR}	0.55											
TR_R		-0.56	-0.18	0.12	-0.68	0.20	-1.20	-0.30	-0.42	-0.38	0.62	1.37
TR_R -R_{BR}		-1.11	-0.73	-0.43	-1.23	-0.34	-1.75	-0.84	-0.96	-0.92	0.07	0.83
σ		7.42	5.80	4.08	4.11	0.74	6.14	4.81	5.59	6.53	7.14	5.50
RVAR		-0.15	-0.13	-0.11	-0.30	-0.46	-0.28	-0.17	-0.17	-0.14	0.01	0.15
Rangking		6	4	3	9	10	8	7	7	5	2	1

***=** the average of sharia mutual fund performance based on sharpe method = -0.16

From the return and standard deviation of sharia equity fund calculation, then it will be determined and averaged the sharpe ratio value of sharia equity fund and being compared with the average of sharpe ratio value from its sharia stock market index (Jakarta Islamic Index/JII). The average of sharia equity fund performance based on sharpe method is -0,16 meanwhile sharia stock market performance based on sharpe method is -0,03. This is proving that in average, sharia equity fund performance is worse that sharia stock market performance (Jakarta Islamic index). That is because sharia equity fund sharpe ratio value is less than sharia stock market (Jakarta Islamic index/JII) sharpe ratio value.

Table 4.2 The Analysis of Sharia Stock Market Index (Jakarta Islamic index /JII) Performance Using Sharpe Method

		JII
MONTH	**SBI***	**Return**
January		
February	5.75	0
March	5.75	-0.90
April	5.75	6.18
May	5.75	-4.89
June	6.00	1.09
July	6.50	5.36
Aug	7.00	5.84
Sept	7.25	2.49
Oct	7.25	-0.83
Nov	7.50	-1.58
Dec	7.5	-8.44
R_{BR}	0.55	
TR_R		0.39
TR_R-R_{BR}		-0.15
σ		4.54
RVAR		**-0.03**

Based on individual performance from each sharia equity fund using sharpe method, it is describing that only 2 (two) sharia equity fund which has better performance than its market index there are SAM sharia equity fund and TRIM Syariah Saham with sharpe ratio value is 0.01 and 0.15. It is higher than sharia stock market index (Jakarta Islamic index /JII) sharpe ratio which is -0.03.

4.2 Result and discussion of hypothesis 2

After determined sharia equity fund return, risk free investment return (*Sertifikat Bank Indonesia*/SBI), and standard deviation from sharia equity fund return, then with Treynor method it can be determined of sharia equity fund performance as following:

Table 4.3 The Analysis of Sharia Equity Fund Performance Using Treynor Method

			PANIN	BATAVIA	CIPTA	L.DHANA	M.INVESTA	M.ATRAKTIF	MANULIFE	PNM	SUCORINVEST	SAM	TRIM
MONTH	**JII (RM)**	**SBI*(R_{BR})**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**	**RETURN**
January													
February	0	5.75	7.31	8.56	4.66	2.59	0.44	6.44	6.81	5.43	10.52	9.81	2.06
March	-0.90	5.75	3.73	3.59	5.93	0.96	-0.20	4.49	2.78	4.14	4.21	9.27	7.22
April	6.18	5.75	6.60	4.65	2.70	2.17	1.06	2.09	3.99	5.96	2.03	5.76	2.52
May	-4.89	5.75	5.02	5.38	0.19	1.83	-0.04	3.12	2.32	5.11	2.03	6.99	-11.35
June	1.09	6.00	-6.73	-8.80	-5.01	-3.60	-0.88	-8.21	-4.43	-9.47	-8.07	-5.46	2.94
July	5.36	6.50	-9.99	-5.63	-6.29	-6.64	0.18	-7.74	-5.42	-6.54	-6.24	-5.91	6.33
Aug	5.84	7.00	-11.91	-6.37	1.71	-6.33	-0.13	-11.51	-6.76	-4.26	-10.29	-8.68	-5.35
Sept	2.49	7.25	6.58	-0.73	-1.46	1.18	1.08	-0.38	-1.07	-0.19	2.57	0.39	6.35
Oct	-0.83	7.25	2.73	2.82	3.80	4.98	1.18	4.27	4.54	3.31	5.25	4.90	3.48
Nov	-1.58	7.50	-8.93	-6.36	-4.20	-5.82	-0.97	-6.23	-6.36	-6.50	-6.84	-9.17	1.41
Dec	-8.44	7.50	-0.56	0.88	-0.76	1.15	0.51	0.41	0.34	-1.60	0.69	-1.11	-0.52
R_{BR}		0.55											
TR_R			-0.56	-0.18	0.12	-0.68	0.20	-1.20	-0.30	-0.42	-0.38	0.62	1.37
TR_R-R_{BR}			-1.11	-0.73	-0.43	-1.23	-0.34	-1.75	-0.84	-0.96	-0.92	0.07	0.83
β			-0.24	-0.30	-0.07	-0.38	0.13	-0.42	-0.28	-0.16	-0.32	0.24	-0.32
RVOL			4.53	2.44	6.14	3.20	-2.73	4.17	3.04	6.14	2.88	0.30	-2.59
Rangking			2	7	1	4	10	3	5	1	6	8	9

***=** the average of sharia mutual fund performance based on Treynor method = 2.50

Based on the calculation of sharia equity fund return and standard deviation. then it will be determined and averaged the Treynor ratio value of sharia equity fund and being compared with the average of Treynor ratio value from its sharia stock market index (Jakarta Islamic Index/JII). The average of sharia equity fund performance based on treynor method is 2.50 and sharia stock market ratio based on treynor method is -0.26. This is proving that the sharia equity fund performance is better than sharia stock market (Jakarta Islamic index/JII) performance because sharia equity fund treynor ratio is higher than sharia stock market index (JII) treynor ratio.

Table 4.4 The Analysis of Sharia Stock Market Index (Jakarta Islamic index /JII) Performance Using Treynor Method

		SBI	JII
MONTH	**SBI***	**Return**	**Return**
January			
Feb	5.75	0	0
March	5.75	0	-0.90
April	5.75	0	6.18
May	5.75	0	-4.89
June	6.00	4.35	1.09
July	6.50	8.33	5.36
Aug	7.00	7.69	5.84
Sept	7.25	3.57	2.49
Oct	7.25	0	-0.83
Nov	7.50	3.45	-1.58
Dec	7.50	0	-8.44
R_{BR}	0.55		
TR_R			0.39
TR_R-R_{BR}			-0.15
β			0.595
RVOL			-0.26

Based on each sharia equity fund performance using treynor method, there are 9 (nine) sharia equity fund which have better performance than its sharia stock market index (Jakarta Islamic Index/JII) and there are 2 (two) sharia equity fund which have worse performance than its stock market index (Jakarta Islamic Index/JII) such as Mandiri Investa Ekuitas Saham and TRIM sharia stock mutual fund with treynor ratio value is -2,73 and -2,59. It is less than sharia stock market index treynor ratio which is -0,03.

4.1. Result and discussion hypothesis 3

The rating of sharia equity fund using sharpe method and treynor method is describe on table 4.5 as following:

Table 4.5 The Performance Rating Comparison Using Sharpe and Treynor Method

	Sharpe Method		**Treynor Method**	
Sharia Equity Fund	**RVAL**	**Rank**	**RVOL**	**Rank**
Panin Dana Syariah Saham	-0,15	6	4,53	2
Batavia Dana Saham Syariah	-0,13	4	2,44	7
Cipta Syariah Equity	-0,11	3	6,14	1
Reksadana Lautan Dhana Saham Syariah	-0,30	9	3,20	4
Mandiri Investa Ekuitas Syariah	-0,46	10	-2,73	10
Mandiri Investa Atraktif-Syariah	-0,28	8	4,17	3
Reksadana Manulife Syariah Sektoral Amanah	-0,17	7	3,04	5
Reksadana Pnm Ekuitas Syariah	-0,17	7	6,14	1
Sucorinvest Sharia Equity Fund	-0,14	5	2,88	6
Sam Sharia Equity Fund	0,01	2	0,30	8
Rd Trim Syariah Saham	0,15	1	-2,59	9

From table 4.5 above, it can be analyzed the order of sharia equity fund performance based on sharpe and treynor ratio. Higher sharpe and treynor ratio mean better sharia equity fund performance. The best sharia equity fund rating according to sharpe method is Trim Sharia Equity Fund with sharpe ratio value is 0.15 followed by SAM Sharia Equity Fund, Cipta Syariah Equity, Batavia Dana Saham Syariah, Sucorinvest sharia Equity Fund with each sharpe ratio is 0.01, 0,11, -0,13 , and -0,14. The next rating is Panin Dana Syariah with ratio value is -0.15, Manulife Syariah Sektor Amanah and PNM Ekuitas Syariah with the same ratio value on -0.17. The worst sharia equity fund according sharpe method is Mandiri Investa Ekuitas Syariah, Lautan Dhana Saham Syariah and Mandiri Investa Atraktif Syariah with each sharpe ratio value is -0.28, -0.30, and -0.46.

The best sharia equity fund rating according to treynor method is Reksadana PNM Ekuitas Syariah and Cipta Syariah Ekuitas which have same Treynor ratio value on 6.14. the next rating is Panin Dana Syariah Saham and Mandiri Investa Atraktif Syariah with each treynor ratio value is 4.53 and 4.17. they followed by Reksadana Lautan Dhana Saham Syariah , Reksadana Manulife Syariah Sector Amanah, Sucorinvest Sharia Equity Fund, and Batavia Dana Syariah Saham with each ratio value is 3.20, 3.04, 2.88, and 2.44. The worst sharia equity fund according to treynor method is SAM Sharia Equity Fund, reksadana TRIM Syariah saham, and Mandiri Investa Ekuitas Syariah with each treynor ratio value is 0.30, -2.59, and -2.73.

From the table 4.5 above indicates that sharia equity fund performance is not consistent with those two method. Only Reksadana Mandiri Investa Ekuitas Syariah which has the same ranking with two different methods. It has the lowest ranks according to sharpe and treynor method. This mean that Reksadana Mandiri Investa Ekuitas Syariah is the worst performance with two different sharpe and treynor method.

The difference result of sharia equity fund performance based on two different methods is caused by several reasons. According to Hartono (2010) sharpe method is using standard deviation as the divider in the formula. It describes the total risk of portfolio. Meanwhile treynor method is using beta as the divider which describe systematic risk from portofolio. If the assumption that all the sharia equity fund which calculated is optimal portfolio, therefore their unique risk will be diversified and the only left is the systematic risk. It will make the total risk will be the same value as the systematic risk. If the sharia equity fund which calculated is optimal portfolio therefore the result using sharpe and treynor method will be similar. From table 4.5 above, if the sharia equity fund has different rank using sharpe and treynor method. It can be concluded as following:

1. The most proper value is sharpe method which calculated risk as total risk. Otherwise treynor method is only assume that its portfolio is optimal. In the reality, the portfolio is not optimal.
2. Those two method can be compared to analyzed the optimal value from sample sharia equity fund. If those sharia equity fund sample are optimal portfolio, then both method will have similar result. Based on table 4.5, the result is not similar. This is caused by the sample sharia equity fund performance is not an optimal mutual fund.

V. Conclusion & Suggestion

The conclusions in this research are:

1. Generally, the performance (return and risk) of sharia equity fund has worse performance than the market as comparison using sharpe method. The average of sharia equity fund performance ratio using sharpe method is -0,16. The average of sharia stock market performance ratio using sharpe method is -0.03. Therefore, it is proven that sharia equity fund performance is worse than sharia stock market performance (Jakarta Islamic index/JII) because sharpe ratio of sharia equity fund is less than sharia stock market index (Jakarta Islamic index/JII).

2. Generally, the performance (return and risk) of sharia equity fund has worse performance than the market as comparison using Treynor Method. The average of sharia equity fund performance ratio using treynor method is 2.50. The average of sharia stock market performance ratio using Treynor method is -0.26. Therefore, it is proven that sharia equity fund performance is better than sharia stock market performance (Jakarta Islamic index/JII) because treynor ratio of sharia equity fund is higher than sharia stock market index (Jakarta Islamic index/JII).
3. There are different result of sharia equity fun dperformance using sharpe and treynor method. Only Mandiri Investa Ekuitas Syariah which has the same rank according to those two different method. It is in the lowest rank. This mean that Mandiri Investa Ekuitas Syariah is the worst performance based on sharpe and treynor method. The different result between sharpe and treynor method is caused by different risk value. Sharpe use standar deviation. Treynor use beta. Besides that, it is also caused by sharia equity fund samples are not optimal portfolio.

Suggestions for this research are:

1. For the investor, before invest to mutual fund, it will be better to do analysis in order to examine mutual fund performance (return and risk). It will give description to which mutual fund that will have the optimal investment return for the investor.
2. For the researcher, it will be better to use more method in order to analyze sharia equity fund performance. Longer time period and more sharia mutual fund type will give better result to examine sharia mutual fund performance.

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