



COMPARISON OF STOCK PERFORMANCE BASED ON ETHICAL INVESTMENT: EVIDANCE ON JII AND SRI-KEHATI INDICES

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ABSTRACT

This research aims to analyze and compare the performance of the Islamic stock portfolio represented by the JII index and ethical investment represented by the SRI-KE-HATI index by measuring the Risk Adjustment Return Index through the Sharpe index, Treynor index, and Jensen Index differential return and appraisal ratio. The data analysis of this research consists of five parts, namely descriptive analysis, analysis of stock performance, with three methods, namely Sharpe, Treynor, and Jensen.differential return and appraisal ratio and Multiple Comparison Test. Based on the comparison of the performance of JII and SRI-KEHATI stocks in 2014-2019, it can be concluded that the overall method of Sharpe, Treynor and differential return shows a negative performance value, which means that the performance is not good, whereas when measured using the Jensen method and Appraisal Return shows positive performance value, which means good performance. When compared between the performance of JII and SRI-KEHATI shares, there is a difference between the performance of the JII and SRI-KEHATI Indices during the study period.

Keywords: Stock Performance, Jakarta Islamic Index (JII), SRI-KEHATI Index, Ehitcal Investment.

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INTRODUCTION

In general, capital market investors emphasize economic criteria as the main consideration in investing. On the other hand, non-economic factors are also considered by investors. Nowadays, people are paying attention to wider corporate social responsibility as part of their business activities. The motivation to invest has undergone a fundamental change, investing is not only seen as an activity that provides financial satisfaction but also spiritual. This kind of investment is often referred to as ethical investment, which is an investment that can be socially responsible because it meets certain moral values and ethical norms (Lee, 2005).

This public demand is accompanied by the emergence of criteria and assessments for companies that are considered more ethical (ethical investment). Companies that apply ethical criteria in business activities, relationships with stakeholders, and the company environment are considered to have more value than companies that ignore ethical aspects. (Hamilton, 1993)

Ethical investment is a form of investment that has its own characteristics because it is linked to certain teachings or values. Several criteria are used in categorizing ethical investment such as religious teachings (Islam and Catholicism), certain types of products (alcohol, tobacco) and certain political situations (Vietnam war, apartheid politics in Africa). Ethical investment generally has two types of screening, which are positive and negative. Positive screening is the support provided to companies that are considered to be running their business activities by meeting ethical investment criteria. Companies that fall into these criteria include companies engaged in the environmental sector, companies that have minimal pollution, companies that apply equality and justice,

Ethical investment interpreted as having met several criteria, both Islamic economic principles and criteria for common stock such as transaction terms. Ethical investment can also be linked to corporate governance theory, because listed companies are companies with better corporate governance than others. This criterion is of course included in the group of Islamic stocks and other stocks based on ethical investment. (Hanafi, 2011).

Indonesia has 3 ethics based indexes, namely JII, ISSI and SRI KEHATI. From several criteria contained in JII, ISSI and SRI KE-HATI, several similarities can be found. The Islamic stock group is included in the ethical investment category because there are several criteria that are in accordance with social ethics or vice versa, the ethical investment-based stock group is included in the category of Islamic investment because there are several criteria in accordance with the teachings of Islam. It's just that there are differences between the two. JII and ISSI emphasize more on criteria based on Islamic teachings (sharia), while SRI KE-HATI emphasizes environmental, social and good corporate governance criteria.

Several studies have discussed the comparison of stock performance based on ethical investment. Among them Renfiana (2018) researching comparison of the Indonesian Sharia Stock Index (ISSI) with SRI-KEHATI on from 2015 to 2017 using the Sharpe, Treynor and Jensen methods. The results based on Sharpe and Jensen's calculations show that the ISSI index has better performance than the SRIKEHATI index, based on the Jensen method, the ISSI index and the SRI KEHATI index do not show any profit due to the influence of market conditions in 2015-2017.

Apart from that Firdaus (2019) analyze the performance comparison of the conventional SRI-KEHATI stock index and the JII Islamic stock index for the 2015-2019 period. The calculation results show that the return and Sharpe SRI-KEHATI index were higher than JII during 2015 to 2019. However, seen from the statistical test results using the Independent Sample T-test, the results show that there is no significant difference between the performance of the conventional SRI stock index. -KEHATI and the JII Islamic stock index.

Heriyanto (2019) examined companies that carry out Social Responsibility Investment (SRI) through calculation of the SRI-KEHATI index and the Jakarta Islamic Index (JII) with the Stock Price Index Combined (IHSG). The observation period in this study was for 7 years, from 2010 to 2016. Hypothesis testing was carried out by means of analytical techniques, namely *independent sample t-test* by using a significance level of 5%. The results are obtained from testing the difference in returns is that there is no difference between the JCI returns with return JII, return JII with return SRI-KEHATI, and return JII with return SRIKEHATI. Result that obtained from testing difference risk is exist difference risk Among risk JCI with risk JII risk IH with the risk of SRI-KEHATI, and there was no difference between the risk of JII and the risk SRI-KEHATI.

In general, some of these studies have shown varied results. Some research shows that JII's stock portfolio performance is not significantly different from the portfolio performance SRI-KEHATI, some others show JII portfolio performance is better than portfolio performance SRI-KEHATI. In addition, there are not many research based on ethical investment, so the authors are interested in analyzing and comparing the performance of the Islamic stock portfolio represented by the JII index and the performance of ethical investment-based stock portfolios represented by the SRI-KE-HATI index by measuring the Risk Adjustment Return. Index via the Sharpe index, Treynor index, and Jensen Index. *differential return and appraisal ratio.*

LITERATURE REVIEW

Jakarta Islamic Index (JII)

Company shares that are listed on the Indonesia Stock Exchange (IDX) are grouped based on certain criteria, one of which is the Islamic stock group. Sharia shares are shares of companies (issuers) which in their operations comply with the rules of Islamic law. The criteria for shares that can be categorized as not violating sharia provisions are based on 2 conditions, namely: (1) Companies whose existence does not conflict with Islamic law. What is meant by companies that do not conflict with Islamic law, namely companies with business and management fields that are not against Islamic law, and have halal products. Companies that produce liquor or conventional financial companies do not meet this category, (2) All shares issued have the same rights. Shares are proof of ownership of a company, so the role of each shareholder is determined by the number of shares he owns. However, in reality, there are companies that issue 2 (two) types of shares, namely ordinary shares and preferred shares which do not have voting rights but have the right to get a definite dividend. Of course this is against the rules of Islamic law regarding profit sharing. So shares in accordance with Islamic law are shares in which each owner has rights that are proportional to the number of shares he owns (Himpunan Fatwa DSN MUI, 2006, No.20) namely common stock and preferred stock which do not have voting rights but have the right to get fixed dividends. Of course this is against the rules of Islamic law regarding profit sharing. So shares in accordance with Islamic law are shares in which each owner has rights that are proportional to the number of shares he owns (Himpunan Fatwa DSN MUI, 2006, No.20) namely common stock and preferred stock which do not have voting rights but have the right to get fixed dividends. Of course this is against the rules of Islamic law regarding profit sharing. So shares in accordance with Islamic law are shares in which each owner has rights that are proportional to the number of shares he owns (Himpunan Fatwa DSN MUI, 2006, No.20).

The sharia criteria for the qualitative screening (selection) process at JII are: (1) the Issuer does not run a gambling / game business which is classified as gambling and trading which is prohibited, (2) Issuer is not a conventional financial institution, (3) Issuer does not produce, distribute, trade in illegal food and drinks, (4) Issuer is not a business that produces, distributes and provides goods / services that destroy morals and are harmful. The quantitative criteria are based more on the company's financial performance relating to the maximum amount of company debt, the maximum amount of non-halal income, the maximum amount of receivables and placement in securities. In detail, it is recorded for more than three months and has a maximum liability to asset ratio of 90% and chooses 60 shares based on the largest average capitalization for the past

year. The final stage is to select 30 stocks based on the order of liquidity levels in the average regular trading value over the past year. (MUI DSN Fatwa Association, 2006, No. 20).

SRI-KEHATI Index

The Indonesian Biodiversity Foundation (KEHATI Foundation) is a foundation that is competent in resource raising and management, with 15 years of experience. The presence of KEHATI is a benchmark for the new stock price index which specifically includes the stock price performance of issuers that have performed very well in encouraging sustainable businesses through a performance methodology based on concerns about the environment, social and good corporate governance.

The basic principles of the SRI-KEHATI Index are as follows: (a) SRI strives to provide a benchmark index that meets good assessments in the categories of environmental preservation (environmental), social development (community), corporate governance, principles of labor (labor practices), and decent work), principles of administration (business behavior) and human rights (human rights) accompanied by economic data of the issuer. For stocks, SRI-KEHATI refers to the principles of applying the relevant methodology to make SRI a price index for 25 issuers' shares that have good performance on the 6 components above, have good liquidity and financial performance and fairly high public ownership, (2) SRI is managed to ensure the application of the same methodology over time. This is especially true if there is a reduction in old issuers and the addition of new issuers to SRI. The goal is that SRI can still represent the performance of issuers' shares on the Indonesia Stock Exchange, (3) SRI is built and managed by maintaining transparency in achieving the objectives of forming this index, basic principles, and methodology to the public. SRI will not provide an opinion on changes that have occurred in this index, nor will it provide an opinion on matters that occur in the issuer's fundamental performance as a result of a significant change in a share in this index. In this case, the KEHATI Foundation cooperates with an independent data provider, namely OWW-Consulting. The goal is that SRI can still represent the performance of issuers' shares on the Indonesia Stock Exchange, (3) SRI is built and managed by maintaining transparency in achieving

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As a new index, the issuer selection stage is carried out, namely those that have the potential to become index members. The initial selection uses the following criteria: (1) Total assets representing the size of SRI issuers, namely those with total assets above Rp. 1,000,000,000,000 based on the annual audited financial report, (2) PER of the issuer which is included in this criterion is a positive PER, (3) Public share ownership must be greater than or equal to ten percent. From the initial selection process, a list of issuers that are eligible to be nominated for the SRI-KEHATI Index was obtained. Furthermore, to select the best 25 Issuers, a further ranking was carried out by considering the fundamental aspects of SRI-KEHATI, namely: environmental, community, corporate governance, human rights, business behavior, labor practices and decent work. Then to test the reliability of these criteria, to obtain a fairly reliable stock price index, SRI-KEHATI has been tested using financial and transaction data from January 2007 to April 2009. The results of the back testing concluded that SRI-KEHATI was quite capable of outperforming the Price Index. Joint Stocks (IHSG). SRI-KEHATI will periodically make adjustments to issuers that deserve to be included in the SRI-KEHATI Index category, including updates to the number of shares outstanding and other events that affect the composition of each share in this index. Updating of stock members in SRI is carried out twice a year, namely every first stock exchange day in February and August (Bennett and Iqbal, 2013) so to obtain a fairly reliable stock price index, SRI-KEHATI has been tested using financial and transaction data from January 2007 to April 2009. The results of the back testing concluded that SRI-KEHATI was quite capable of outperforming the Composite Stock Price Index (IHSG). SRI-KEHATI will periodically make adjustments to issuers that deserve to be included in the SRI-KEHATI Index category, including updates to the number of shares outstanding and other events that affect the composition of each share in this index. Updating

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RESEARCH METHODOLOGY

Population and Sample

The population in this study are all companies that are members of the JII and SRI-KE-HATI indexes that have been listed on the Indonesia Stock Exchange (IDX) for the 2014–2019 period. The sample of this study is all sharia stocks that are members of the JII and SRI-KE. -HEART on the Indonesia Stock Exchange (IDX), which number. The data in this study is secondary data obtained from various sources such as journal articles, books, and websites. This study uses time series data in the form of daily and sustainability reports published by the company from 2014 to 2019. The data is then analyzed descriptively to determine the results of the comparison between JII and SRI-KE-HATI. The data sources in this study were obtained by the authors from the daily closing price data taken from www.yahoo-finance.com. The data collection technique used in this research is documentation, namely data collection techniques by retrieving data through

existing documents. In this case the researcher used daily historical price data from JII and SRI-KEHATI

Data Analysis Method

This research data analysis method consists of three parts, namely (1) descriptive analysis (2) analysis of stock performance, with three methods, namely Sharpe, Treynor, and Jensen. *differential return* and *appraisal ratio* (3) Multiple Comparison Test. These three parts will be described below:

Descriptive Analysis

Descriptive analysis in this study seeks to present data in the form of mean, standard deviation, minimum value and maximum value with the help of Eviews 10 software.

Stock Portfolio Performance Analysis

Sharpe Performance Measure

One of the methods used to compare portfolio performance is using the concept of the Capital Market Line (CML) or better known as the Reward to Variability Ratio (RVAR). Where Sharpe stated that the portfolio performance series is calculated as the net result of the portfolio with a risk-free interest rate per unit risk, given the symbol S_p . The Sharpe performance index is calculated by the following formula):

$$\hat{S}_p = \frac{\overline{R}_p - \overline{RF}}{\sigma_{TR}}$$

Information:

\hat{S}_p = Performance index *Sharpe*.

\overline{R}_p = Average portfolio returns.

\overline{RF} = Average risk free return

σ_p = total risk which is the sum result of systematic risk and unsystematic risk.

If the portfolio is highly diversified, the total risk is almost the same as systematic risk because unsystematic risk is close to zero. This can also be called if the portfolio is the same as the market portfolio, the total risk is the same as the systematic risk or market risk or it can be called beta (Manurung, 2000).

Treynor Performance Measures

Treynor As one of the indices used to measure portfolio performance, Treynor assumes that a highly diversified portfolio is known as the Reward to Volatility Ratio (RVOR). Therefore the Treynor index states that the portfolio performance series is calculated as the net result of the portfolio with a risk-free interest rate per unit of market risk for the portfolio with the symbol T_p . The Treynor performance index is calculated by the following formula:

$$\hat{T}_p = \frac{\overline{R}_p - \overline{RF}}{\hat{\beta}_p}$$

Information:

\hat{T}_p = Performance index *Treynor*.

\overline{R}_p = Average portfolio returns.

\overline{RF} = Average risk free return

$\hat{\beta}_p$ = Market risk of the portfolio or portfolio systematic risk.

In calculating the Treynor index, it is an assumption that must be considered that the results provide an evaluation of one period, because the return on the portfolio and risk requires a long period. If the period used is short enough, the risk calculated by beta gives an unreasonable or unrepresentative result. Besides that, the assumption of normality of the rate of return also needs to be considered.

Jensen's Performance Measure

As a measure of portfolio performance, Jensen pays close attention to CAPM in measuring portfolio performance which is often referred to as the Jensen ALPHA (differential return measure). Jensen ALPHA is an absolute measure that estimates a constant rate of return over the investment period where Jensen ALPHA gets a return above (below) from the buy-hold strategy with the same systematic risk. The Jensen ALPHA formula is as follows:

$$\hat{J}_p = \overline{R}_p - \left[\overline{RF} + (\overline{R}_M - \overline{RF}) \hat{\beta}_p \right]$$

Information :

\hat{J}_p = Jensen portfolio index

\overline{R}_p = average portfolio return.

\overline{RF} = average risk-free return.

$\hat{\beta}_p$ = market risk of the portfolio or portfolio systematic risk

The higher the positive AP, the better the portfolio performance. Jensen ALPHA can be calculated in another way, namely by simplifying the above equation into the equation below:

$$R_p - R_f = a_p + b_p (R_m - R_f)$$

The equation above shows that portfolio premium risk is influenced by market premium risk. The values a and b in the above equation are estimated according to a model known as regression. Therefore original time series data from portfolios, market rates of return and risk free interest rates should be available. The highest and significant a value is the best portfolio of existing portfolios.

Differential Return

Differential Return with risk expressed as standard deviation. The concept used for this parameter is the concept of the capital market line (CML). Identifying the level of market portfolio profit (RM), the capital market line is the line connecting RM with RF. The difference between the profit level of a portfolio and the profit that lies in the CML, for the same standard deviation, is called the differential return. If the rate of return on a portfolio is greater than the rate of return at CML, then the differential return is positive. Otherwise, the differential return is negative. A good portfolio is a portfolio that has a positive (and largest) differential return.

Appraisal Ratio

Information Ratio (IR) which is also often referred to as Appraisal Ratio and assessment ratio (Kidd, 2011). The value of the Information Ratio measures the abnormal return per unit of risk which can then be diversified by the presence of a market portfolio. The Information Ratio is an extension of the risk-free Sharpe Ratio which is replaced by a reference portfolio (Nadifa, 2016). Information Ratio uses a comparison, which is an active risk or tracking error. Where tracking error is a measure used in assessing a portfolio's performance relative to benchmarks (Blatt, 2004).

RESULTS AND DISCUSSION

Descriptive Analysis

Return Daily and Average Return of Each Index

The calculation of daily return and average return of JII and SRI KEHATI is presented in the table below.

Table 1
The result of calculating the Average Return for 2014-2019

Index	2014	2015	2016	2017	2018	2019
JII	0.0005863	-0.0004553	0.0006409	0.000401	-0.0003411	0.000126
SRI-KEHATI	0.000569	-0.000393	0.000703	0.0010477	-8.99966E-05	0.000273

Source: www.investing.com, the data is processed by the author (2020)

Table 1 shows that in 2014, JII was able to provide higher returns than SRI-KEHATI. Then in 2015 JII has a minus that is higher than SRI-KEHATI. In 2016 and 2017, SRI-KEHATI's return was able to outperform JII. Then in 2018 SRI-KEHATI had a smaller minus than JII. In 2019, SRI-KEHATI returned to surpass JII.

Risk Free Indonesia

Risk free in Indonesia in 2014-2019 shows a decline. Risk free data is shown in the following table Table 2 also shows that risk free development in Indonesia has consistently decreased from year to year. One of the factors causing this reduction in interest rates is inflation. Inflation directly has an impact on increasing interest rates and then affects the value of stock performance. This is because investors prefer to invest in bank deposits rather than in the very risky capital market.

Standard deviation

The purpose of calculating the standard deviation is to find out how far each observed value is from the mean which is within the average standard deviation. Standard deviation aims to determine the stock risk of each index. The data from the calculation of the standard deviation of the JII and SRI KEHATI indexes are shown in the following table:

Table 2
Risk Free Calculating Results in Indonesia

Month	2014	2015	2016	2017	2018	2019
January	7.50%	7.75%	7.25%	4.75%	4.25%	6.00%
February	7.50%	7.50%	7.00%	4.75%	4.25%	6.00%
March	7.50%	7.50%	6.75%	4.75%	4.25%	6.00%
April	7.50%	7.50%	6.75%	4.75%	4.25%	6.00%
May	7.50%	7.50%	6.75%	4.75%	4.75%	6.00%
June	7.50%	7.50%	6.50%	4.75%	5.25%	6.00%
July	7.50%	7.50%	6.50%	4.75%	5.25%	5.75%
August	7.50%	7.50%	5.25%	4.50%	5.50%	5.50%
September	7.50%	7.50%	5.00%	4.25%	5.75%	5.25%
October	7.50%	7.50%	4.75%	4.25%	5.75%	5.00%
November	7.50%	7.50%	4.75%	4.25%	6.00%	5.00%
December	7.75%	7.50%	4.75%	4.25%	6.00%	5.00%
Total	0.9025	0.9025	0.72	0.5475	0.6125	0.675
Average	0.0752	0.0752	0.0600	0.0456	0.0510	0.0563

Source: www.bi.go.id data processed by the author, (2020)

Table 3
Standard Deviation Calculation Results

Index	2014	2015	2016	2017	2018	2019
JII	0.010408	0.0141980	0.0119434	0.0072016	0.013057	0.010042
SRI-KEHATI	0.013340	0.014596	0.011474	0.007193	0.013546	0.009402

Source: processed by the author (2020)

Table 3 above shows that in 2014, 2015, 2018 and 2019 SRI-KEHATI had more stock risk than JII. Meanwhile, in 2016, 2017 JII has a higher risk than SRI-KEHATI

Market Return Calculation

The calculation of the JCI daily market return is shown in the table Table 4 below shows that the JCI in 2014, 2016, 2017 had positive returns and 2015, 2018 and 2019 had negative returns.

Stock beta

The beta calculation for the JII and SRI-KEHATI index shares is shown in the table below:

Table 4
Return Stock Market

No.	Code	2014	2015	2016	2017	2018	2019
Rm	JCI	0.000826975	-0.00048	0.000618	0.00078	-5.54051E-05	9.38391E-05
Stadev	JCI	0.009384096	0.010923	0.008812	0.005267	0.0101621	0.007111852

Source: www.investing.com data processed by the author, (2020)

Table 5
Stock Beta Calculation Results

No.	Index	2014	2015	2016	2017	2018	2019
1	JII	1.19638	1,24511	1.27375	1,20090	1.20848	1,28057
2	SRI-KEHATI	1.287494	1.310197	1.245988	1.25113	1.278959	1,23539

Source: www.investing.com data processed by the author, (2020)

Table 5 above shows that both JII and SRI KEHATI in 2014-2019 had positive returns.

Stock Performance Analysis

Normality test

The normality test in this study can be seen in the following table:

Table 6
Normality of the Sharpe Method 2014-2019

No.	Index	Prob. Jarque-Bera	Information
1	JII	0.147378 > 0.05	Normal
2	SRI-KEHATI	0.865600 > 0.05	Normal

Source: data processed by the author, (2020)

Table 6 on the stock performance of the JII and SRI-KEHATI indexes shows that the data is normally distributed because the value of Sig > 0.05 means that the assumption of normality is fulfilled.

Table 7
Normality of the Treynor Method in 2014-2019

No.	Index	Prob. Jarque-Bera	Information
1	JII	0.724425 > 0.05	Normal
2	SRI-KEHATI	0.499016 > 0.05	Normal

Source: data processed by the author, (2020)

Table 7 in JII and SRI-KEHATI shows that the data is normally distributed because the value of Sig > 0.05 means that the assumption of normality is fulfilled.

Table 8
Normality of the Jensen Method in 2014-2019

No.	Index	Prob. Jarque-Bera	Information
1	JII	0.462437 > 0.05	Normal
2	SRI-KEHATI	0.77820 > 0.05	Normal

Source: data processed by the author, (2020)

Table 8 shows that the JII and SRI-KEHATI stocks show Normal distribution because the value of Sig > 0.05 means that the assumption of normality is met.

Table 9
Normality Differential Method in 2014-2019 years

No.	Index	Prob. Jarque-Bera	Information
1	JII	0.554369 > 0.05	Normal
2	SRI-KEHATI	0.945675 > 0.05	Normal

Source: data processed by the author, (2020)

Table 10
Normality of the Appraisal Ratio Method in 2014-2019

No.	Index	Prob. Jarque-Bera	Information
1	JII	0.788552 > 0.05	Normal
2	SRI-KEHATI	0.498845 > 0.05	Normal

Source: data processed by the author, (2020)

Based on these results, it can be concluded that the residuals of the JII and SRI-KEHATI stock performance regression equations have a normal distribution. This is shown in the Asymp value. Sig (2-tailed) 0.756 is greater than alpha 5% in each country for 2014-2019.

Difference Test 2014-2019

The results of the 2014-2019 performance difference test are shown in the following table:

Table 12
Different Test Repeat Measure

Multivariate Tests b						
Effect		Value	F	Hypothesis df	Df error	Sig.
PERFOR	Pillai's Trace	.987	1.470E2a	4,000	8,000	.000
MANCE	Wilks' Lambda	.013	1.470E2a	4,000	8,000	.000
	Hotelling's Trace	73,482	1.470E2a	4,000	8,000	.000
	Roy's Largest Root	73,482	1.470E2a	4,000	8,000	.000

a. Exact statistics

b. Design: Intercept

Within Subjects Design:

PERFORMANCE

Source: Secondary data processed by researchers, (2020)

Based on the repeat measure difference test, it is known that for performance, the P-value is (0.000) <0.05 then, there is a difference in the performance of the four countries in 2014-2019 from each index (Sharpe, Treynor, Jensen, differential return and appraisal ratio). The difference also shows a significant value because the Hotellings's Trace Value (73,482) > Pillai's Trace (0.987).

Table 13
Test of Within-Subjects Contrasts

Tests of Within-Subjects Contrasts						
Measure: METHOD						
Source	PERFOR MANCE	Type III Sum of Squares	df	Mean Square	F	Sig.
PERFORMANCE	Linear	142,080	1	142,080	389,561	.000
	Quadratic	100,262	1	100,262	387,041	.000
	Cubic	34,577	1	34,577	386,995	.000
	Order 4	4,401	1	4,401	338,236	.000
Error (PERFORMANC E)	Linear	4,012	11	.365		
	Quadratic	2,850	11	.259		
	Cubic	.983	11	.089		
	Order 4	.143	11	.013		

Source: data processed by the author, (2020)

Based on the table, it is known that Pvalue (0.000) <0.05, which indicates that there are differences in the performance of JII and SRI-KEHATI shares during the study period. This means that in the Repeated Measure Anova sig <0.05, H0 is rejected and Ha is accepted, in other words there is a difference in

the average stock performance of each index. Based on output processed, it can be concluded that the P-value of the JII and SRI-KEHATI Index is the same, which has a sig value of $0.00 < 0.05$, so the stock performance has no significant difference.

Table 14
Comparison Results of Each Performance with the Sharpe Method, Treynor, Jensen, differential return and appraisal ratio 2014-2019 years

2014	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-7.1681916	-0.06236	0.01436	-0.00728	-0.000201	-1.44473452
SRI-KEHATI	-5.5945	-0.05796	0.021123	-0.03052	-0.000200	-1.1324114
2015	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-5.3285	-0.0607	0.018574	-0.023170	1.98175E-05	-1.078755
SRI-KEHATI	-5.1790	-0.05769	0.023562	-0.025928	6.64022E-05	-1.047797
2016	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-4.9700	-0.0466	0.015638	-0.020483	1.80364E-05	-1.0042853
SRI-KEHATI	-5.1679	-0.04759	0.0146922	-0.017320	6.8219E-05	-1.0436099
2017	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-6.27611	-0.03763	0.008626	-0.01568	-0.0003151	-1.2642218
SRI-KEHATI	-6.1938	-0.03560	0.011523	-0.01560	0.0002139	-1.2466526
2018	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-3.9318	-0.04248	0.01035	-0.0145	-0.000236	-0.7957332
SRI-KEHATI	-3.7715	-0.039946	0.014207	-0.0170	-2.70466E-05	-0.762853209
2019	Sharpe	Treynor	Jensen	DF	AP	Average
JII	-5.5833	-0.0437	0.01577	-0.023022412	2.52721E-05	-1.1268454
SRI-KEHATI	-5.9484	-0.04527	0.013385	-0.017973383	0.000145 024	-1.1996226

Source: Secondary data processed by researchers, (2020)

Based on the comparison of the stock performance of JII and SRI-KEHATI in 2014-2019, it can be concluded that the overall method of Sharpe, Treynor and differential return shows a negative performance value, which means that the performance is not good, whereas when measured using the Jensen method and Appraisal Return shows positive performance value, which means good performance.

When compared between the performance of the JII and SRI-KEHATI shares, the performance value is different between the performance of the JII and SRI-KEHATI Indices during the study period. This is because JII and SRI-KEHATI both had negative performance during the study period. If viewed from the Sharpe, Treynor, Jensen method, differential return and Appraisal Return, it can be seen that the performance of JII and SRI-KEHATI has almost the same

stock performance value, but when compared from the average calculation results of the 5 measurement methods SRI-KEHATI has better performance than JII.

CONCLUSION AND LIMITATIONS

Conclusion

After analyzing the results of the research described in the previous chapter, the following conclusions can be drawn:

1. Overall, both JII and SRI-KEHATI for the sharpe, treynor and differential return methods show a negative performance value, which means that the performance is not good, whereas when measured using the Jensen method and the Appraisal Return shows a positive performance value, which means that the performance is good.
2. There is a difference in performance between the JII and SRI-KEHATI Indexes during the study period. This is because JII and SRI-KEHATI both had negative performance during the study period. If viewed from the Sharpe, Treynor, Jensen method, differential return and Appraisal Return, it can be seen that the performance of JII and SRI-KEHATI has almost the same stock performance value, but when compared from the average calculation results of the 5 measurement methods SRI-KEHATI has better performance than JII.

Policy Implications and Limitations

The policy implication that can be taken from the results showing that the performance of JII shares is not better than SRI-KEHATI shares is that if investors want to invest ethically (ethical investment) then get a reliable performance measure we need to do the following: (1) Maximizing the number of observations by taking more frequent sources of returns (2) Determining the right portfolio arrangement to get a better risk estimate for each observation period

In investing, investors should first conduct a portfolio analysis to decide which stocks to be targeted for investment, so that the investment objective to obtain maximum profit can be achieved. Investors can choose stocks that are included in the JII and SRI KE-HATI portfolios to invest because the stocks included in the JII and SRI KE-HATI indexes have strong fundamentals and good company performance and are ethically based.

In this study there are several limitations. Secondary data obtained through various publication sources may be less reliable because it is possible for errors in inputting data, so that the results obtained can be biased. The sampling of this research is based on purposive sampling so that the results of this study cannot be used as a basis for generalization. This study faces the problem of data limitations, especially in the time the research used was too narrow, which was only three

years. With the development of the business world and the Jakarta Stock Exchange (JSE), further researchers are expected to increase the research period so that it is expected to explain the logical consistency of investment managers in managing mutual fund portfolios.

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