

Comparison of Sharia Performance and Conventional Mutual Funds in Forming Optimal Portfolio

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ABSTRACT

This research aims to analyze the differences in the performance of Islamic stock mutual funds and conventional stock mutual funds in forming an optimal portfolio using the Sharpe and Treynor models. Purposive sampling was used in determining the data sample which was then analyzed using the descriptive method with a comparative study during the period January 2018 to December 2019. Hypothesis testing used a different test to determine the difference between the two using the SPSS Application Tool. The results showed that the calculation of the performance of stock mutual funds using the Sharpe method, both Islamic and conventional stock mutual funds, there was no significant difference. Likewise, the results of the calculation of the performance of stock mutual funds using the Treynor method show that there is no difference between the performance of Islamic stock mutual funds and conventional stock mutual funds. This is one proof of the development of the Islamic economy in Indonesia, especially in the capital market, so that Islamic mutual funds can compete with conventional mutual funds.

Keywords: *Performance, Optimal portfolio, Mutual Funds, Sharpe, Treynor*

ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan kinerja reksa dana saham syariah dan reksa dana saham konvensional dalam membentuk portofolio optimal dengan menggunakan model Sharpe dan Treynor. Purposive sampling digunakan dalam menentukan sampel data yang kemudian dianalisis menggunakan metode deskriptif dengan studi banding selama periode Januari 2018 hingga Desember 2019. Pengujian hipotesis menggunakan uji beda untuk mengetahui perbedaan antara keduanya menggunakan Alat Aplikasi SPSS. Hasil penelitian menunjukkan bahwa perhitungan kinerja reksa dana saham dengan metode Sharpe baik reksa dana saham syariah maupun konvensional tidak terdapat perbedaan yang signifikan. Demikian pula hasil perhitungan kinerja reksa dana saham dengan menggunakan metode Treynor menunjukkan bahwa tidak terdapat perbedaan kinerja reksa dana saham syariah dengan reksa dana saham konvensional. Hal ini menjadi salah satu bukti perkembangan ekonomi syariah di Indonesia khususnya di pasar modal, sehingga reksa dana syariah dapat bersaing dengan reksa dana konvensional.

Kata kunci : Kinerja, portopolio Optimal, reksadana, *Sharpe, Treynor*

INTRODUCTION

Investment is an activity that can not be separated from the business world where investment can be defined as delaying current consumption to be included in productive assets for a certain period of time. Investment is generally defined as a decision to spend funds at the present time to buy real assets or financial assets with the aim of getting greater income in the future (Kuswandanu, 2015). Investors can put their assets into investment products and hope to get a profit in the future from investors' investment results. For investors, through the capital market, they can choose investment objects with various rates of return and levels of risk faced, while for issuers (issues or issuers) through the capital market they can raise long-term funds to support business continuity (Hermawan, 2012). According to data published by the Indonesia Stock Exchange in 2018, Indonesia was ranked first in ASEAN for companies categorized as IPO and Go-Public companies as many as 57 companies in one period. This achievement proves that the enthusiasm of the company in expanding the company by opening the company's ownership to the public is very high so that investors can easily access the opportunity for the company's shares, which proves that the listing is the largest number from 1992 until now (Heryanti, 2017).

on the other hand, the total daily transaction value of circulating shares on the Indonesia Stock Exchange (IDX) increased from the previous year by 11% and the average daily transaction frequency reached 386,968 times or this transaction was the highest daily transaction in ASEAN. By the end of 2018, there were 619 companies listed on the Indonesia Stock Exchange. The significant increase was not only in transactions, there was also an increase in the number of investors. Throughout 2018, the number of investors increased by 226,096 investors, so that the overall number of investors who saved their shares on the Indonesia Stock Exchange was 851,093 investors with a total increase of 29% throughout 2018. This increase proves the increasing interest of the Indonesian people to save stocks. This increase must be supported by an increase in the performance of stocks in Indonesia so that it does not discourage public interest in investing. Rational investment must pay attention to how the investment can generate optimal returns at a certain level of risk or otherwise obtain a certain return with a minimal level of risk, this can be done by diversification. Portfolio diversification is the formation of a portfolio through the selection of a certain combination of assets in such a way that risk can be minimized without reducing the expected return (Sunaryo, 2019). Diversification can be realized by combining various stock options in investment (forming an optimal stock portfolio) (Kuswandanu, 2015). In general, the optimal portfolio is the portfolio with the best performance. There are many concepts to measure the performance of this portfolio. In particular, the optimal portfolio is the portfolio that provides the highest return with the lowest risk (Heryanti, 2017).

The formation of a portfolio is important so that you can make decisions when

investing. One way to influence someone to invest is by looking at the performance of the mutual fund. Mutual funds are one of the capital market investment products that are considered ideal by (domestic) investors considering the relatively high level of profit offered is mutual funds, which previously were only familiar with bank products such as savings, time deposits, and current accounts. Mutual funds are an alternative investment for the investor community, especially small investors and investors who do not have much time and expertise to calculate the risk of their investment (Ratnawati & Khairani, 2013). The choice between Islamic mutual funds and conventional mutual funds depends on market conditions and investors' personal preferences. There are many ways to find out the performance of Islamic mutual funds and conventional mutual funds, namely through the Sharpe index, Treynor index and Jensen index methods. In the Sharpe index method, portfolio performance is measured by comparing the portfolio risk premium (the difference between the average portfolio return and the risk-free interest rate) and the portfolio risk expressed by the standard deviation (total risk) (Halim, 2015). In the Treynor method, portfolio performance is measured by comparing the portfolio risk premium (the difference between the average portfolio return and the risk-free interest rate) and the portfolio risk expressed by beta (market risk). Meanwhile, the Jensen method uses the concept of the Security Market Line (SML), which is a line that connects the market portfolio with risk-free investment opportunities.

There are many studies on the comparison of the performance of Islamic mutual funds with conventional ones. One of them is done by Jepriyansyah Putra and Fauzi who stated that Islamic mutual funds have a higher return and lower risk than conventional mutual funds. Hypothesis testing on the performance of equity funds is different but not significant measured by the Sharpe ratio and Treynor ratio, while the Jensen ratio test shows a significant difference. Hypothesis testing on fixed income funds is different but not significant measured by the Sharpe ratio, Treynor ratio, and Jensen ratio. Hypothesis testing on mixed mutual funds is different but not significant measured by the Sharpe ratio, Treynor ratio, and Jensen ratio (Putra & Fauzie, 2014). This research supports what has been done by Vince Ratnawati who said that the performance of Islamic mutual funds is not inferior to the performance of conventional mutual funds and can compete in performance (Ratnawati & Khairani, 2013). Similar research was also conducted by Huda & Hudori, (2017), Hamzah & Yohanes, (2014). Based on previous research, many only make comparisons between the performance of Islamic mutual funds and conventional mutual funds. However, in this study, apart from comparing the performance of Islamic mutual funds with conventional mutual funds, the researchers will also focus on how the performance of Islamic and conventional mutual funds in forming an optimal portfolio.

METHOD

The population in this study are Islamic and conventional mutual funds listed on the Indonesia Stock Exchange (IDX), which are 272 equity mutual funds.

The sample used in this study was mutual funds listed on the Indonesia Stock Exchange (IDX) between the period January 2018 - December 2019. The sampling technique used purposive sampling with the following criteria:

Table 1 Purposive Sampling Criteria

Sample Selection	Number
1. Sharia Mutual Funds that are actively registered on the IDX for the period January 2018-December 2019	40 232
2. Conventional mutual funds that are actively listed on the IDX for the period January 2018-December 2019	38 (each 14%)
3. Number of selected Sharia and conventional mutual funds.	

The analytical methods used in this research is to use quantitative data analysis is an analysis of the data by using statistical calculations. Methods of data analysis used in this study are as follows:

a. Optimal portfolio formation

In Markowitz approach, the selection of the investor's portfolio based on their preferences against the expected returns and risks of each option portfolio. Portfolio theory known as the concept of efficient portfolio and Optimal portfolio. Efficient Portfolio is a portfolio that provides maximum returns for investors with a certain risk level, or portfolios that offer the lowest risk to the level of a certain return. While the optimal portfolio is a portfolio of selected investors of the many options available on the Markowitz approach efisien. portfolio diversification to overcome the weakness that is less efisien for using this model, investors can take advantage of all the information provided as the basis for the formation of the portfolio formation optimal.

The process of forming the optimal portfolio involves several stages as bellow:

1) Calculating the Return fund, Return each asset calculated using the equation r

$$R_{it} = \frac{NBAt - NBAt - 1}{NBAt - 1}$$

2) Calculating the return Calculating Standard Deviation is not enough for an investment. Risk of investment also need to be taken into account. The risk level is calculated using the standard deviation of daily returns via equation:

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (R - R)^2}{n}}$$

3) Calculating Correlation and covariance next step is to determine the correlation coefficients, which express the relationship between the returns of the fund with

a return of other mutual funds. Manually correlation coefficient can be calculated by the equation:

$$r_{AB} = \rho_{AB} = \frac{COV(R_A R_B)}{\sigma_A \sigma_B}$$

Then calculate the covariance and variance from the standard deviation of the portfolio. Covariance can be searched by the formula manually as follows:

$$COV(R_A R_B) = \mathbf{Rab} = \sum_{i=1}^n \frac{(RA_i - E(RA)) \cdot (RB_i - E(RB))}{n}$$

As for determining the standard deviation of daily variant carried by summing the covariance, according to the equation:

$$\sigma^2 P = W_1^2 \sigma_1^2 + W_2^2 \sigma_2^2 + 2 W_1 W_2 COV(r_1, r_2)$$

- 4) Determine the Optimum Portfolio Composition elected. The next step is to determine the weight of each mutual fund that will be included in the portfolio. To determine the type of the fund weights used in the software help solver Ms. Excel, so it will get a combination of assets that provide the best risk return ratio.

b. Test performance measurement Islamic mutual funds and conventional funds

Islamic mutual funds performance measurement Test and conventional mutual funds using the Sharpe and Treynor Index Indeks.

- 1) Analyze the performance of mutual funds with Sharpe Index

$$Si = \frac{(Rit - Rft)}{\sigma_{it}}$$

Where : s_i = Sharpe index of mutual fund i at time t

Rit = Return of mutual fund i at time t

Rft = Return risk free rate at time t

σ_{it} = Standard Deviation of mutual fund i at time t

- 2) to analyze the performance of mutual funds with the Treynor Index:

$$Ti = \frac{Ri - Rf}{\beta_i}$$

Where:

Ti = mutual fund treynor i

Ri = average return of mutual fund i during the study

Rf = average risk free rate during the study

β_i = Beta of mutual fund i during the study

c. Normality test

Normality test is used to determine the distribution of research data that has

been done. This test is carried out using the Kolomogrov-Smirnov test. To find out whether the data is normal, close to normal or abnormal, the state of the data like this indicates the data can be used in research. In addition, that in this study used a different test that was carried out was a two-sample t test (independent sample t test). This test will compare the mean of two groups that are not related to each other. The analytical method used in this research is to use quantitative data analysis which is data analysis with statistical calculation techniques.

RESULT AND DISCUSSION

Stock Mutual Fund Return Calculation Results

Return mutual fund is a rate of return that can be expressed as a percentage of Net Asset Value. Return mutual fund that is used in this study only the type of stock mutual funds that have been selected. Here are the results of calculation of Shariah and Conventional Mutual Funds Return:

Table 2 calculation Mutual Fund Shares

No.	Reksadana	Return	Σ	β	SHARPE	TREYNOR
1.	Ashmore Dana Ekuitas Nusantara	0,02051	0,113	-8,35560	0,16203	0,02077
2.	Ashmore Dana Progresif Nusantara	0,02323	0,167	-9,60251	0,12602	0,02347
3.	Ashmore Saham Sejahtera Nusantara	0,00867	0,044	-2,94026	0,14497	0,00943
4.	Batavia Saham Sejahtera	0,00202	0,034	0,10020	-0,00653	-0,02033
5.	Batavia Saham Cemerlang	0,02067	0,035	-8,42841	0,52545	0,02093
6.	Batavia Dana Saham	0,06162	0,076	-27,16070	0,78382	0,06170
7.	Bnp Paribas Ekuitas	-0,02026	0,065	10,29226	-0,34726	-0,02048
8.	Bnp Paribas Infrastruktur Plus	-0,02527	0,040	12,58336	-0,69594	-0,02545
9.	Eastspring Investments Value Discovery Kelas a	0,01506	0,232	-5,86564	0,05519	0,01545
10.	Mandiri Saham Atraktif	-0,01234	0,036	6,66776	-0,40345	-0,01267
11.	Manulife Dana Saham Utama	0,00804	0,041	-2,65516	0,14270	0,00889
12.	Danareksa Mawar Ekuitas Plus	0,03767	0,206	-16,20427	0,17239	0,03780
13.	Panin Dana Maksima	-0,01800	0,042	9,25940	-0,48687	-0,01825
14.	Pool Advista Kapital Optimal	-0,04919	0,117	23,52473	-0,43999	-0,04929
15.	Sam Dana Cerdas	0,02460	0,086	-10,22686	0,25876	0,02482
16.	Schroder 90 Plus	-0,01530	0,058	8,02116	-0,30394	-0,01558

Equity Fund						
17.	Schroder Dana Prestasi	0,01641	0,046	-6,48140	0,30842	0,01676
18.	Schroder Dana Prestasi Plus	-0,00453	0,058	3,09460	-0,11586	-0,00525
19.	Bahana Primavera 99	0,09257	0,395	-41,31611	0,22843	0,09262
20.	Bniam Dana Saham Inspiring Equity Fund	-0,00677	0,045	4,12030	-0,20031	-0,00731
21.	Bnp Paribas Maxi Saham	0,00769	0,043	-2,49146	0,12743	0,00859
22.	Bnp Paribas Pesona	0,03080	0,174	-13,06182	0,16387	0,03097
23.	Danareksa Mawar Ekuitas Utama	-0,01869	0,077	9,57168	-0,27051	-0,01892
24.	Hpam Ultima Ekuitas 1	-0,02572	0,075	12,78874	-0,37306	-0,02589
25.	Mandiri Investa Atraktif	0,00504	0,062	-1,27973	0,04510	0,00679
26.	Manulife Dana Saham	0,03641	0,171	-15,62874	0,20037	0,03655
27.	Minna Padi Pasopati Saham	-0,00936	0,076	5,30558	-0,15163	-0,00978
28.	Pinnacle Dana Prima	-0,04591	0,083	22,02447	-0,57966	-0,04601
29.	Sam Indonesian Equity Fund	0,00972	0,080	-3,42310	0,09337	0,01038
30.	Schroder Dana Istimewa	-0,01441	0,069	7,61630	-0,24229	-0,01471
31.	Schroder Dana Prestasi Prima	0,05895	0,218	-25,93840	0,26038	0,05903
32.	Manulife Greater Indonesia Fund	0,03527	0,147	-15,10992	0,22516	0,03542
33.	Batavia Dana Saham Syariah	0,03177	0,140	-13,50781	0,21049	0,03194
34.	Bnp Paribas Pesona Syariah	-0,00068	0,036	1,33317	-0,08149	-0,00235
35.	Capital Sharia Equity	0,05618	0,112	-24,67170	0,47980	0,05627
36.	Corfina Equity Syariah	-0,04203	0,104	20,24860	-0,42707	-0,04214
37.	Corfina Investa Saham Syariah	-0,03742	0,104	18,13857	-0,38205	-0,03754
38.	Hpam Syariah Ekuitas	-0,02094	0,077	10,60416	-0,30120	-0,02115

Source: OJK Mutual Fund NAV Report, 2021 (processed)

Return the result of investments obtained by investors from their investment in the form of mutual funds. Results were expressed in an increase in the investment value or net asset value (NAV) Mutual funds are used as an investment instrument. Based on data from the stock mutual fund returns 38 sampled seen that almost the entire increase fluctuated during the study period from the month of January 2018 until December 2019. Overall return of the return value is greatest equity funds Bahana Primavera 99 in January 2018, with the

return of 1.94427. This value is the return that occur or acquired in the past. For the lowest return mutual fund shares owned by Eastspring Investments Value Discovery Class A with a return value of 0.89435 in September 2019. The value proves that the fund has a return value fluctuated. It proves the greater the return (return) the greater the risk to be borne so require investors to maintain a balance returns.

Calculation results of the risk Mutual Fund Standard Deviation (σ)

In general, the risk can be summed up as a condition certainly faced by a person or company in which the losses can occur so that each investor in making a decision should always try meminimalisirkan various risks that arise, both short term and long term. Each investor has a condition either micro or macro economy prompted investors pursuing a strategy to minimize the risk to benefit. The risk here is defined as the difference between the expected (expected return) and its realization. The greater the deviation, the greater the level of risk. The standard deviation is used to measure the level of risk. Standard deviation calculation in this study using Microsoft Excel.

Based on the data in Table 2, it can be interpreted that if the investor to invest in the period from January 2018 until December 2019, then the risk is measured using the standard deviation has a value of standard deviation is the largest mutual fund shares Bahana Primavera 99 with a value of 0.395 and the lowest is owned by Batavia Shares Prosperous with a value of 0.034, while the average risk as measured by standard deviation amounted to 0,100.

Mutual Risk Calculation Results Beta (β)

The first step before calculating performance by Jensen's method is to calculate the value of index Beta (β) of each mutual fund shares. Table 2 is the result of the calculation Beta saham. Berdasarkan each mutual fund data, of 40 equity funds that were sampled, it can be interpreted that if the investor meninstasikan capital in the period of January 2018 up to December 2019, the risk is measured using a beta portfolio has the mean average risk of -1.81722.

Results of Data Calculation with Sharpe Index Method

Sharpe method can be measured from the rate of return, where the Sharpe method measures the return of a portfolio against the standard deviation or total risk. Then it is compared with the calculation of mutual fund performance with market performance according to the Sharpe method. By calculating all of that, the results will be visible, so the greater the value of the mutual fund sharpe measurement from the market sharpe measurement, the better the mutual fund performance (Sepdiana, 2019).

Based on the table 2 calculations above, it can be seen that the largest share

of stock mutual fund performance data using the Sharpe method is owned by the Batavia Dana Saham mutual fund with a sharpe value of 0.783819 and the lowest stock mutual fund performance is the Bnp Paribas Infrastruktur Plus mutual fund with a Sharpe value of - 0.695944109. This means that the stock mutual fund cannot produce a return that is in accordance with its specific risk, if it is selected it will certainly be detrimental.

Results of Calculation of Performance of Islamic and Conventional Mutual Funds with the Treynor Index Method

The Treynor method is not much different from the Sharpe method, both of which use risk premium. However, Treynor measures risk by market risk or beta while Sharpe uses total risk. Beta is obtained by regressing mutual fund returns against the Composite Stock Price Index (JCI) returns (Santosa & Sjam, 2012). Based on the table 2, it can be seen that the amount of data on the performance variable of research stock mutual funds using the Treynor method is the largest Mutual Fund Bahana Primavera 99 with a Treynor value of 0.09262 and the lowest stock mutual fund performance is the Pool Advista Kapital Optimal mutual fund with a Treynor value of - 0, 04929, it means that the stock mutual fund cannot produce a return that is in accordance with its specific risk, if selected, it will certainly be detrimental.

Table 3 Comparison of Sharpe and Treynor Methods

NO.	MUTUAL FUNDS WITH SHARPE METHOD	MUTUAL FUNDS WITH THE TREYNOR METHOD
1	Batavia Dana Saham	Bahana Primavera 99
2	Batavia Saham Cemerlang	Batavia Dana Saham
3	Capital Sharia Equity	Schroder Dana Prestasi Prima
4	Schroder Dana Prestasi	Capital Sharia Equity
5	Schroder Dana Prestasi Prima	Danareksa Mawar Ekuitas Plus
6	Sam Dana Cerdas	Manulife Dana Saham
7	Bahana Primavera 99	Manulife Greater Indonesia Fund
8	Manulife Greater Indonesia Fund	Batavia Dana Saham Syariah
9	Batavia Dana Saham Syariah	Bnp Paribas Pesona
10	Manulife Dana Saham	Sam Dana Cerdas

Table 3 above describes the results of the comparison made of 38 equity mutual funds. The researchers compared the 10 best-ranked stock mutual funds using the Sharpe and Treynor methods. From these results, there are 8 stock mutual funds that are ranked in the top 10 even though the performance of stock mutual funds is calculated using these two methods. The 8 equity mutual funds included in the top 10 rankings for mutual fund performance using the Sharpe and Treynor methods are Batavia Dana Saham Mutual Funds, Capital Sharia Equity Mutual Funds, Schroder Dana Prestasi Prima Mutual Funds, Sam Dana Cerdas Mutual Funds, Batavia Dana Saham Syariah Mutual Funds, Manulife Greater Indonesia Mutual Funds, Fund, Bahana Primavera 99 Mutual Fund and Manulife Mutual Fund Dana Saham.

Return Calculation Results Market

Return-making levels of the market is a viable portfolio represents all portfolios that can be generated by the association of a given asset. In this study, using a portfolio of JCI. Stock Price Index (CSPI) is the combined value of shares of companies listed on the Indonesian Stock Exchange (BEI) which pergerakannya indicative of conditions that occur in the market. Market Return calculation results can be seen in Table 4 as follows:

Table 4 Calculation Results Return Market

Bulan	2018			2019		
	IHSG	Return	Risk Free Rate	IHSG	Return	Risk Free Rate
Januari	6.605,631	0,039	0,00177	6.532,969	0,055	0,00250
Februari	6.597,218	-0,001	0,00177	6.443,348	-0,014	0,00250
Maret	6.188,987	-0,062	0,00177	6.468,755	0,004	0,00250
April	5.994,595	-0,031	0,00188	6.455,352	-0,002	0,00250
Mei	5.983,587	-0,002	0,00198	6.209,117	-0,038	0,00250
Juni	5.799,237	-0,031	0,00219	6.358,629	0,024	0,00250
Juli	5.936,443	0,024	0,00219	6.390,505	0,005	0,00240
Agustus	6.018,460	0,014	0,00229	6.328,470	-0,010	0,00229
September	5.976,553	-0,007	0,00240	6.169,102	-0,025	0,00219
Oktober	5.831,650	-0,024	0,00240	6.228,317	0,010	0,00208
November	6.056,124	0,038	0,00250	6.011,830	-0,035	0,00208
Desember	6.194,498	0,023	0,00250	6.299,539	0,048	0,00208

Source: Indonesia Stock Exchange (IDX), 2020 (processed)

Risk Free Rate Calculation Results Mutual Funds

Risk Free Rate is the rate of return that can be produced from a risk-free asset. An asset is regarded as risk-free if there is no assurance get a return on a future as interest rate of SBI pembayarannya Indonesian government guaranteed. Because the data SBI recent years are hard to obtain, then the calculation of Risk free rate in this study uses data BI 7-Day (Reverse) repo rate issued by the Bank directly from the period January 2018 until December 2019

Normality Test Results

Normality test is a test used to determine the distribution of research data that has been carried out. The application used in this study is SPSS 23. The results of the tests carried out using SPSS 23 are as follows:

Table 5 Normality Test Result

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
sharpe	,127	38	,126	,969	38	,369
treynor	,083	38	,200*	,973	38	,465

Based on the results of SPSS 23 processing, the significance value of Sharpe data in the Kolmogorov-Smirnov column shows that the significance value is 0.126 greater than 0.05 (> 0.05), this indicates that the data used is normally distributed. Likewise, Treynor's data shows that the significance value of 0.200 is greater than 0.05 (> 0.05), this indicates that the data used is normally distributed.

Different Test Results (Independent T-Sample)

Table 6 Independent Samples Test

		t-test for Equality of Means				
					Mean Difference	Std. Error Difference
		t	Df	Sig. (2-tailed)		
sharpe	Equal variances assumed	,436	36	,666	,065042	,1493115
	Equal variances not assumed	,408	6,656	,696	,065042	,15927270
treynor	Equal variances assumed	,670	36	,507	,009697	,01447503
	Equal variances not assumed	,569	6,233	,589	,009697	,01703338

Based on table 6 above shows the results of the Independent Samples Test using the SPSS 23 application. These results indicate that the significance value using the Sharpe method in the sig column. (2-tailed) of 0.666 is greater than 0.05 (> 0.05), this indicates that the H_0 is accepted so that there is no significant difference between Sharia Mutual Funds and Conventional Mutual Funds. Likewise, using the Treynor method shows a significance value of 0.507 which is greater than 0.05 (> 0.05), this indicates that the H_0 is accepted so that there is no significant difference between the performance of Islamic Mutual Funds and Conventional Mutual Funds.

Performance Analysis Of Sharia And Conventional Mutual Funds In Forming Optimal Portfolio

Mutual funds are a profitable investment place if they have a performance that exceeds market performance. Meanwhile, mutual funds that have underperforming market performance are mutual funds that still have to be taken into account as a place of investment (Rustendi, 2017). The results of the comparison between mutual fund performance using the Treynor and Sharpe methods show different results when viewed from the mean of each method. By using the Treynor method, the average value of the calculation of the performance of stock mutual funds is superior or greater than the Sharpe method (Darmayanti et al., 2018). Meanwhile, when viewed from the results of the significance value test or the results of the hypothesis test, using the Sharpe method shows that in the period January 2018 to December 2019 there is no significant difference between the performance of Islamic Mutual Funds and the performance of Conventional Mutual Funds. This is as concluded by Handayani et al., (2019) in her research which shows that there is no significant difference in the performance of Islamic and conventional mutual funds, Both types of mutual funds are evenly distributed in the top 10 rankings. By using this method has a significant value greater than 0.05. this proves that H_0 is accepted so that there is no difference between the performance of Islamic Mutual Funds and the performance of Conventional Mutual Funds.

Likewise, if using the Treynor method, it shows that in the period January 2018 to December 2019 it shows that there is no significant difference between the performance of Islamic mutual funds and the performance of conventional mutual funds. This is as concluded by Mujiani & Sakinah, (2019) in her research which shows that there is no significant difference in the performance of Islamic and conventional mutual funds. This is indicated by the significance value in this method is greater than 0.05 so that H_0 is accepted, so there is no difference between the performance of Islamic Mutual Funds and the performance of Conventional Mutual Funds. Both types of shares are evenly distributed in the top 10 rankings using the Treynor method. The calculation of the average return of Islamic and conventional stock mutual funds can also be seen in the following table:

Table 7 Islamic and conventional stock mutual funds

	Reksadana	N	Mean	Std. Deviation	Std. Error Mean
Sharpe	Reksadana Konvensional	32	-,0185450	,33102187	,05851695

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Treydor	reksadana syariah	6	-,0835867	,36285169	,14813358
	reksadana konvensional	32	,0072016	,03127648	,00552895
	reksadana syariah	6	-,0024950	,03946391	,01611108

Based on the table 7 data above, the average return on sharia mutual funds is -0.0835867, which is smaller than the average return for conventional mutual funds of -0.0185450 when calculating mutual fund performance using the Sharpe method. However, the value of the standard deviation is greater for sharia mutual funds of 0.36285169 compared to conventional mutual funds of 0.33102187. This shows that Islamic mutual funds can still compete with conventional mutual funds. Likewise, the calculation of the average value of mutual fund returns using the Treynor method produces an average value of conventional mutual funds of 0.0072016 which is greater than the average value of Islamic mutual funds of -0.0024950. while the standard deviation of sharia mutual funds is 0.03946391, which is greater than that of conventional mutual funds of 0.03127648. This shows that Islamic mutual funds are able to compete with conventional mutual funds even though they are lost in numbers.

These results are in line with research conducted by Handayani et al., (2019); Mujiani & Sakinah, (2019); Riyadi et al., (2014) which states that there is no difference in the performance of Islamic mutual funds and the performance of conventional mutual funds using the Sharpe and Treynor methods. This proves that although sharia mutual funds are still few in number, they are not inferior in performance to conventional mutual funds that already exist and are already numerous in number. This is an increase in the Islamic economy in grounding sharia in every sector, especially in the capital market sector.

However, this study is not in line with research conducted by (Rahmah, 2016) which states that the performance of conventional mutual funds is better than the performance of Islamic mutual funds calculated using the Sharpe and Treynor method. In this study, the return generated by conventional mutual funds is superior to Islamic mutual funds as well as the risk of Islamic mutual funds is greater than conventional mutual funds. However, the results of the calculations in this study prove that there has been an increase in the Islamic capital market in the last 2 years. This is evidenced by the absence of a difference in the performance of Islamic mutual funds with the performance of conventional mutual funds, even though Islamic mutual funds are outnumbered by conventional mutual funds.

According to table 3, there are 10 best ratings of stock mutual funds, both sharia and conventional. Of the ten, there are sharia mutual funds, namely Capital Sharia Equity Mutual Funds and Batavia Dana Saham Syariah. Of the two stock mutual funds, they represent the 6 Islamic stock mutual funds that were selected to be sampled. This shows that Islamic stock mutual funds are not inferior in competing with conventional mutual funds in terms of performance. Meanwhile, from conventional mutual funds there are 6 that are included in the top 10 rankings using both methods, namely Sharpe and Treynor. The six conventional equity mutual funds are Batavia Dana Saham, Schroder Dana Prestasi Prima, Sama Dana Cerdas, Bahana Primavera 99, Manulife Greater Indonesia Fund and Manulife Dana Saham. The six stock mutual funds represent the 32 conventional stock mutual funds selected as the research sample. Of the two stock mutual funds, each is evenly distributed, namely 25% of each stock mutual fund in each method used.

The results of the hypothesis test in table 5 above show that sharia mutual funds in forming an optimal portfolio are not inferior to conventional mutual funds so that they can compete well. Thus, there is no longer any reason not to choose sharia mutual funds as a place to invest because the performance of sharia mutual funds has improved. Until now, there are still many Indonesian people who do not fully believe in sharia economics, especially in the capital market sector so that it will affect the performance of sharia mutual funds themselves. This is evidenced by the higher percentage of foreign investors compared to Indonesian investors (Firmansyah, 2020).

Based on the state of the economy at the time of the study, it shows a positive economic improvement that affects investment in Indonesia. Even until the end of 2019, mutual funds still showed their existence in facing the global economy. This shows that mutual funds still tend to be loved by investors, especially Islamic mutual funds, which do not want to be outdone by conventional mutual funds. This allows the results obtained to show that there is no significant difference between the performance of conventional mutual funds and the performance of Islamic mutual funds. Until the end of February, the Minister of Finance of the Republic of Indonesia explained that the performance of Islamic mutual funds, especially fixed income and money market mutual funds, was superior to conventional mutual funds of the same type. The superior performance of Sharia mutual funds increases public confidence in their products.

The increase in the positive trend of Sharia mutual funds is inseparable from the government's support in activating this trend with policies that have been taken by the government through various sectors. One of the dominant policies that influence the positive trend of Islamic mutual funds is responding to a decline in interest rates. In addition, the easier regulation of stock transactions makes it easier for the public to invest. The stability of the JCI is also one of the factors that influence Sharia mutual funds, especially the type of stock mutual funds, because with the stability of the JCI, it is certain that the shares in them are stable so that people are not worried about the risks they receive. In addition to the factors already mentioned, the most dominant is the increasingly positive public trust in all Sharia products in Indonesia. This trust will foster a positive trend for all Sharia products, it is possible that it will also affect Sharia mutual fund products.

Based on this explanation, the development of Sharia mutual funds in Indonesia is gradually improving, this is based on the achievements of the last few years obtained by almost all Sharia sectors in Indonesia. This is inseparable from the trust of the people who are increasingly enthusiastic in realizing an Islamic economy. Improved public trust cannot be separated from better economic performance in the Sharia sector. Especially in the investment sector that produces many products, one of which is Sharia mutual funds. Sharia Mutual Funds, especially the types of shares, are directly supervised by the Sharia Supervisory Board so that the products produced are far from things that are prohibited by Sharia, including usury. By setting the contract in accordance with Sharia and all elements that have been calculated, the Sharia mutual funds taken by the researcher are free samples from usury and elements that are forbidden by Sharia. This is evidenced by the consistency of the company being indexed in JII consecutively. This proves that the Sharia mutual funds taken as a sample include Sharia mutual funds of the type of shares that are recognized for their sharia and provide satisfactory performance.

Apart from being free from the element of usury, this Sharia Mutual Fund is free from speculation. The mechanism in place prevents investors from speculating. This is because the investment will be managed by a professional investment manager so that in the use of investment funds, use the knowledge possessed by the investment manager and the experience possessed. This avoids speculation that only depends on fate. In addition, by managing investments by investment managers, it will lead to justice with even distribution of income and avoid disparity or inequality in the distribution of income among the community. Based on the discussion above, it can be concluded that there is no significant difference between the performance of Islamic mutual funds and conventional mutual funds, so that in general, sharia mutual funds are able to compete with conventional mutual funds in any case. This is a significant improvement for the Islamic economy because it can compete well with conventional which in fact already exists before sharia.

CONCLUSION

Based on the results of the analysis and discussion that has been stated above, the results of the hypothesis test for calculating the performance of stock mutual funds using the Sharpe method and the Treynor method show that there is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds. In accordance with the research that has been done, investors no longer need to hesitate with sharia mutual funds because the performance of sharia mutual funds has improved and is no less competitive with conventional mutual funds. In addition, investors must really choose the mutual fund to be chosen both in terms of the optimal portfolio and in terms of performance. In this study, only the Sharpe and Treynor methods were used. In addition, the period used is only 2 years and the type of mutual fund used is only stock mutual funds. So it is recommended that further researchers are expected to be able to explore other types of mutual funds as well as with more complex methods and the latest and updated data.

REFERENCES

- Darmayanti, N. P. A., Dewi, N. P. S. S., Rahyuda, H., & Sutrisna, S. K. (2018). Perbandingan Kinerja Reksa Dana Saham Dengan Metode Sharpe, Treynor, Dan Jensen. *Jurnal Riset Ekonomi Dan Bisnis*, 11(2), 93–107.
- Firmansyah, L. (2020). Penerapan Dan Perkembangan Reksadana Syariah Di Indonesia. *Jurnal Ilmu Akuntansi Dan Bisnis Syariah*, 2(1), 68–80.
- Halim, A. (2015). *Analisis Investasi dan Aplikasinya: Dalam Aset Keuangan dan Aset Riil*. Salemba Empat.
- Hamzah, A., & Yohanes, A. (2014). Analisis Perbandingan Kinerja Reksadana Syariah Dengan Reksadana Konvensional Jenis Saham Pada Periode 2008 – 2012. *Jurnal MIX : (Jurnal Ilmiah Manajemen)*, 4(3), 396–409.
- Handayani, T. U., Santosa, P. W., & Setianingrum, A. (2019). Perbandingan Kinerja Reksadana Konvensional dengan Syariah. *Journal of Economics and Business Aseanomics*, 4(2), 77–92.
- Hermawan, D. A. (2012). Pengaruh Debt To Equity Ratio, Earning Per Share Dan Net Profit Margin Terhadap Return Saham. *Management Analysis Journal*, 5(1), 1–7.
- Heryanti, S. A. (2017). Perhitungan Value At Risk Pada Portofolio Optimal: Studi Perbandingan Saham Syariah Dan Saham Konvensional. *Ikonomika*, 2(1), 1–10.
- Huda, N., & Hudori, K. (2017). Analisis Perbandingan Kinerja Reksadana Saham Syariah Dan Konvensional Periode 2012-2015. *Jurnal Kajian Ekonomi Dan Bisnis Islam Iqtishadia*, 10(2), 184–209.
- Kuswandanu, E. (2015). Analisis Portofolio Optimum Saham Syariah Menggunakan Stochastic Dominance. *Jurnal Fourier*, 4(1), 17–29.
- Mujiani, S., & Sakinah, R. (2019). Perbandingan Penilaian Kinerja Reksadana Saham Konvensional dan Syariah Dengan Metode Treynor dan Sharpe. *AKRUAL Jurnal Akuntansi Dan Keuangan*, 1(1), 84–100.
- Putra, J., & Fauzie, S. (2014). Analisis Perbandingan Kinerja Reksadana Konvensional Dengan Reksadana Syariah Di Indonesia. *Jurnal Ekonomi Dan Keuangan*, 5(2), 282–295.
- Rahmah, A. (2016). Analisis Perbandingan Kinerja Reksadana Syariah Dan Kinerja Reksadana Konvensional Dengan Metode Sharpe, Treynor Dan Jensen. *Analytica Islamica*, 5(1), 20–40.
- Ratnawati, V., & Khairani, N. (2013). Perbandingan Kinerja Reksadana Syariah Dan Reksadana Konvensional. *Jurnal Akuntansi (Media Riset Akuntansi & Keuangan)*, 1(1), 96–113.

- Riyadi, Mulya, Heykal, M., & Indrawati, T. (2014). Analisis Perbandingan Reksadana Saham Syariah Dengan Reksadana Saham Konvensional Periode 2009–2012. *Journal Binus Business Review*, 5(1), 230–240.
- Rustendi, T. (2017). Analisis Kinerja Reksa Dana Pendapatan Tetap, Reksa Dana Saham, Dan Reksa Dana Campuran (Studi Di Bursa Efek Indonesia – BEI). *Jurnal Ekonomi Manajemen*, 3(2), 83–95.
- Santosa, M., & Sjam, A. A. (2012). Penilaian Kinerja Produk Reksadana Dengan Menggunakan Metode Perhitungan Jensen Alpha, Sharpe Ratio, Dan Information Ratio Treynor Ratio. *Jurnal Manajemen*, 12(1), 63–75.
- Sepdiana, N. (2019). Kinerja Reksa Dana Syariah di Pasar Modal Indonesia. *JAS (Jurnal Akuntansi Syariah)*, 3(1), 118–132.
- Sunaryo, D. (2019). *Bahan Ajar Manajemen Investasi dan Portofolio*. CV. Qiara Media.