

Performance Comparison of Mutual Funds and Sharia Mutual Funds

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Abstract

Purpose: This study aimed to examine the differences in the performance of Islamic mutual funds with mutual funds based on the Sharpe and Jensen method for the 2010-2020 periods in the Indonesian capital market.

Research Methodology: The study uses a quantitative approach to the type of comparative research. The data used is secondary data from Otoritas Jasa Keuangan (OJK). The population used in this study is the capitalization of sharia mutual fund performance data with mutual funds, the periods 2010-2020 (monthly data) in the Indonesian capital market. Data analysis was carried out using the Sharpe and Jensen method and the Manova test with the help of the SPSS statistical program.

Results: The results of this study indicate that there is no significant difference between the performance of Islamic mutual funds and mutual funds with the Sharpe and Jensen method. This shows that the return on the performance of Islamic mutual funds and mutual funds based on the Sharpe and Jensen method received will be relatively the same. Investment performance in mutual fund portfolio management is reflected in the Net Asset Value (NAV).

Conclusions: The results show no significant difference in the performance of Islamic and conventional mutual funds, as measured by the Sharpe and Jensen methods. This indicates that returns from both types of funds are relatively similar, and investment performance, reflected in Net Asset Value (NAV), is influenced by the manager's policies and strategies.

Limitations: This research has been attempted and carried out in accordance with scientific procedures. However, it still has limitations; this research is limited to 2010 – 2020 with monthly data.

Contributions: This research implies that this research can better contribute to the general public, academics, and investors to understand the performance of capital market investment instruments before they invest.

Keywords: *Performance, Mutual Funds, Sharia Mutual Funds, Sharpe and Jensen Methods*

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1. Introduction

Indonesia is a country with a large capital market performance in growing the sharia-based and conventional financial industry. Sharia-based and conventional investments in the capital market have the aim of developing finance in Indonesia. For now, especially during the COVID-19 pandemic,

sharia-based and conventional investment activities have begun to decline. It turned out that in an increase, the development of the world economy also declined due to COVID-19, including the country of Indonesia ([Muhammad, Sari, & Nafisa, 2021](#)). During the first Quarter of 2020, Indonesia has quite a record of economic growth from 2.97%. Data on the realization of investment realization in the first quarter Investment performance is an activity return portfolio of investment activities. The investment activity portfolio contains one or more assets. Investment performance is calculated over a certain period as well as in a certain currenc ([Sari, Sulchan, & Mutamimah, 2021](#)). Investors often compare different types of returns. The difference between the total of returns as well as price, which one is the first to assess the income flower but the second only assesses the appreciation of the capital.

Sharia mutual funds in Indonesia, first introduced in 1997, are investment instruments designed to collect funds from the public who have sufficient capital but limited time and understanding of investment activities. Unlike conventional mutual funds, sharia mutual funds operate according to sharia principles, ensuring that investment instruments and procedures comply with Islamic law, including all portfolio management processes ([Robiyanto, Santoso, & Ernayani, 2019](#)). They provide a practical solution for small-scale investors or those unable to assess investment risks, allowing their funds to be managed professionally by investment managers through diversified securities portfolios. By pooling public funds, sharia mutual funds not only facilitate broader participation in the capital market but also aim to enhance the role of local investors in Indonesia's investment activities. The researchers discuss this research due to we want to examine the performance of sharia and conventional instruments before and during the covid-19 pandemic, wherein the first quarter of 2020, asset classes are added to a portfolio ([Alim, Mai, & Setiawan, 2021](#)). The higher the Sharpe Ratio value, the better the performance of an Indonesian Capital Market instrument. Furthermore, the researcher chose the Jensen method on the grounds that this method does not indicate the same performance in the future. ([Bareksa, 2021](#)) Indonesia only has a record growth of 2.97% in the economy. Researchers chose sharia mutual fund products compared to mutual funds on the grounds that these products experienced rapid growth pretty good in the last five years. Growth The economic conditions that occur in this investment activity can be seen from the NA ([Bareksa, 2021](#)).

The researchers selected the Sharpe method due to it is widely used to measure investment performance based on risk-adjusted returns. This method is also relevant for comparing changes in the overall risk-return characteristics of a portfolio when new assets or asset classes are included. A higher Sharpe Ratio indicates better performance of an Indonesian capital market instrument. In addition, the Jensen method was used due to it evaluates portfolio performance by comparing actual returns with expected returns based on systematic risk, although past performance does not necessarily guarantee similar performance in the future ([Bareksa, 2019](#)).

2. Literature Review

2.1 Theory Description

2.1.1 Portfolio Performance

a. Sharpe Performance Measure

Assessment of the size of Sharpe's Performance is the method used in distinguishing a portfolio's performance. Sharpe tries to formulate a series of portfolio activity performance whose value can be measured as a net result from portfolio activities. Sp can symbolize the risk-free interest rate per unit of risk ([Qudratullah, 2019](#)).

2.1.2 Mutual Fund

In Law 8 of 1995 Article 1 paragraph 27 relating to the capital market, mutual funds are a forum to collect financial funds from the public to be included in securities portfolio investments that managers in investment activities will carry out ([Agustin, 2019](#)). The characteristics of mutual funds are, a collection of owner funds, where a mutual fund owner is a person who invests his money with various variations, meaning that mutual funds can be carried out individually or by institutions, where the party invests in mutual funds according to the purpose of the investment, funds are invested in securities known as investment instruments, and mutual funds are managed by Investment Managers.

So that with the existence of mutual funds, the community can surrender its duties. Mutual funds have predicted and observed stocks to have a good prospectus and can provide profitable value due to they are managed by investment advisors in their fields (Su et al., 2020). Mutual funds are related to the stock exchange due to mutual funds are tools for investing that have the aim of helping investors enter their capital in a company that is an issuer. The presence of mutual funds can reduce the risk resulting from stock investment due to investment advisors will have predictive potential in seeing the stocks they choose (Liu, Lee, & Lee, 2020). Mutual funds in Indonesia were originally in 1995, with the birth of corporate mutual funds in the field of PT. BDNI Mutual Funds. Benefits to investors, namely: Mutual fund investments offer various conveniences and benefits, especially for investors who find it difficult to manage investments independently. First, mutual funds provide access to investment instruments that are challenging to implement alone, allowing for broader diversification opportunities. Investment management is conducted by experienced investment managers, while investment administration is handled by a Custodian Bank, ensuring professional, and secure management.

a. Manager

Its management consists of investment managers and custodian banks. An investment manager is a company whose business activities manage a portfolio of securities owned by customers and is responsible for the investment. Meanwhile, the custodian bank acts as a repository of wealth. The custodian bank is responsible for carrying out investment administration activities, including transaction settlement, registration, and securities registration (Van Ho & Alshaleel, 2018). So, the funds owned by mutual funds belong to investors and are stored in custodial banks.

b. Legal Form

In Indonesia, there are two legal forms of mutual funds, namely in the form of a Limited Liability Company and a Collective Investment Contract. The PT will issue shares that investors can purchase. Meanwhile, Collective Investment Contract mutual funds issue participation units. Mutual funds are distinguished by their operational nature, namely open and closed mutual funds.

c. Investment Placement, Proof of Ownership, and Investment Return

Investment in mutual funds is by purchasing shares or participation units issued by mutual funds. Units of participation can be assumed to be like units of company shares. The price per unit of participation is measured based on the Net Asset Value (NAV/unit of participation) generated by the custodian bank every day and reported in daily newspapers. For proof of ownership of the participation unit, the bank will provide a confirmation letter of ownership of the participation unit. Some mutual funds do not send confirmation letters but issue or print monthly reports, which are also useful for proof of ownership of the participation unit (Knobel, 2019).

d. Mutual Fund Fees and Taxes

Open-ended mutual fund investors must pay attention to the costs provided directly and indirectly. Direct costs are given to investors in the form of purchase fees charged when purchasing the investment units and resale costs charged when investors resell their investment units. Indirect costs provided to investors consist of investment manager fees, custodian bank fees, transaction fees, auditor fees, and tax costs directly related to investment management. These costs are said to be indirect due to they are not immediately focused on investors (Yoshino, Taghizadeh-Hesary, & Nakahigashi, 2019).

Table 1. Differences between sharia mutual funds and mutual funds

Sharia Mutual Funds	Mutual Fund
Managed according to sharia principles	Managed without paying attention to sharia principles
Investments only in sharia securities are allowed	Investment in all allowed securities
There is a mechanism for cleaning non-halal assets	Do not use the concept of cleaning non-halal property
There is a Sharia Supervisory Board	There is no Sharia Supervisory Board

Table 1 shows that sharia mutual funds are managed based on sharia principles, invest only in sharia-compliant securities, apply a cleansing mechanism for non-halal income, and are supervised by a Sharia Supervisory Board. In contrast, conventional mutual funds are managed without specific sharia considerations, may invest in all permitted securities, do not apply non-halal asset cleansing, and have no Sharia Supervisory Board.

2.2 Previous Studies

Research that supports the performance of sharia mutual funds vs. mutual funds is research conducted to analyze the performance of Islamic stock mutual funds using the Sharpe, Treynor, Jensen, M^2 , and TT methods. The result is that there are no sharia-based equity mutual funds that perform positively ([Arifin & Nur, 2019](#)). Research that supports the performance of sharia mutual funds vs. mutual funds is research conducted by ([Sari et al., 2021](#)), by looking at the performance of Islamic stock mutual funds and conventional stock mutual funds. The results showed that the performance of conventional stock mutual funds was superior to the performance of Islamic stock mutual funds based on the Sharpe r/s method of 11,900. The difference between this study and research from Sustainable is using the Sharpe method, while this study uses the Sharpe and Jensen method.

3. Research Methodology

3.1 Research Design

This study uses a quantitative approach due to this study emphasizes testing theories through the assessment of research variables with numbers according to statistical procedures ([Sugiyono, 2014](#)). While this type of research uses the type of comparative research. Comparative research is comparative research. Comparative research is comparing the existence of a variable or more in two or more different samples or at different times.

3.2 Research Variable

In a study, there are research variables that are commonly referred to as variables X and Y variables. The independent variable is a variable that is deliberately manipulated to know its intensity or its effect on the independent (bound) variable. It can also be interpreted that the independent variable is a variable that affects other variables. ([Iqbal, 2013](#)) construct the dependent variable (independent) is a variable where the variable arises as a result of the independent variable. Or it can be said that the dependent variable arises due to there is an influence or response from the dependent variable or what is commonly called the independent variable. In this study, the independent variable is mutual funds vs sharia mutual funds.

3.3 Population, Sample Technique, and Research Sample

3.3.1 Population

The population is an area of generalization consisting of objects and subjects with quality grades carried out by researchers to conclude. The population used in this study is the capitalization of sharia mutual fund performance data and mutual funds using the Sharpe, Jensen method for the period 2010-2020 (monthly data) in the Indonesian Capital Market.

3.3.2 Sampling Technique

In this study, a non-probability sampling technique was used due to the sample was found in monthly data related to its performance. Non-probability sampling is used in taking a sample that does not provide an opportunity for every element of the existing population.

3.3.3 Sample

The sample is part of the additional characteristics possessed by the population. The sample in this study is the performance data of sharia mutual funds and mutual funds, using the Sharpe, Jensen method for the period 2010-2020 (monthly data) in the Indonesian Capital Market. Thus, the final result of the amount of data studied as research samples amounted to $11 \times 12 = 132$ samples in each independent variable.

3.4 Research Instruments

The research instrument is a tool to assess the natural and social phenomena under study. A research instrument is a tool or a facility used by a researcher to conduct research or research ([Aithal & Aithal, 2020](#)). This is useful for obtaining better, more accurate, complete, or more accurate results so that the data is easy to process and easy to analyze. In other books also explained the meaning of the instrument. It is explained that a research instrument is a tool or facility used by a researcher to collect the data needed in research in order to obtain complete, accurate data so that data processing is easier.

3.5 Sources and Data Collection Techniques

3.5.1 Data Source

Data is a raw material that needs to be processed so that it can produce information or a description, both quantitative and qualitative data that shows facts ([Aydiner, Tatoglu, Bayraktar, Zaim, & Delen, 2019](#)). Data sources are divided into 2, namely, primary data and secondary data. In this study, researchers used secondary data sources from official websites or websites related to the studied variables. Secondary data is data collected beforehand or published by the relevant agencies so that the data can be obtained from the official website or from the accounting information of a company being studied. Meanwhile, for the time of data collection, in this study, researchers used time-series data taken in monthly form over 11 years ([O'Connor, 2020](#)).

3.5.2 Data Collection Technique

Data collection technique is a technique or a method used by researchers to collect data in order to test data. Data collection includes things that simplify things, then compile them into data that is easy to understand. Whether it's data in numeric form or data in categorical form ([Reksoatmodjo, 2019](#)).

a. Observation technique

The observation method is a method that is carried out in order to observe the object of research. The observation technique is carried out to explore data or information that is the observational and systematic recording of the object being studied. Research observation can be done directly or indirectly. In connection with this study, researchers used indirect observation of the object of research being studied, namely, indirect observation through official website visits, news and information related to the object of this research.

b. Literature study

A literature study is research-based on library theory based on understanding or theory derived from the study of books and so on. Use it as a reference material that may be needed when conducting research. Literature study includes matters related to theoretical research object information. Both are related to the understanding of research variables and other things that may be needed, especially in order to examine theoretical knowledge of the variables being studied. Data collection techniques are carried out in the form of documentation. Documentation is secondary data stored in the form of files (conventional and electronic records), books, and writings.

3.6 Data Analysis

3.6.1 Sharpe Method

$$Sp = \frac{Rp - Rf}{\sigma p} \quad (4)$$

Informations:

- Sp = index of Sharpe's performance.
- Rp = return from portfolio.
- Rf = return free from risk interest rate free from risk.
- σp = Standard deviation.

b. Jensen method

$$J = Rp - [Rf + (Rp - Rf)\beta] \quad (5)$$

Informations:

- J = index of Jensen's performance.
- R_p = return from portfolio
- R_f = risk-free return, risk-free interest rate.
- β = portfolio beta

After assessing the data, the next step is to analyze the data statistically using the SPSS program.

3.6.2 Classic Assumption Test

1. Normality

Normality serves to indicate that the existing data is normally or not normally distributed. Graph analysis and statistical test (Kolmogorov-Smirnov test) indicates the distribution. The data must be normally distributed if it goes into parametric analysis. The reference for making a decision is using the Kolmogorov-Smirnov test by comparing significance with the magnitude, if the significance $>$ then the data is normally distributed. When the skewness and kurtosis ratio is between -2 and 2, then the assumption of normality shows that it is fulfilled. And vice versa. Due to the data used in this study for each variable amounted to more than 30 ($n \geq 30$), the data were considered normal and could be analyzed using the Kolmogorov-Smirnov test.

2. Multicollinearity Test

The multicollinearity test can arise due to causality between two or more dependent variables and the fact that two or more explanatory variables are simultaneously influenced by a third variable outside the model. To find out the multicollinearity of a study, it is necessary to pay attention to the VIF (Variance Inflation Factor) value of less than 10, so it can be said that the test avoids multicollinearity. In a test, it is hoped that the tested data will avoid multicollinearity.

3. Heteroscedasticity Test

Multiple regression models that meet the requirements have the same variance from one test residual with the other tests being fixed. Or it can be called homoscedasticity so that a good test is a test that avoids heteroscedasticity. This can be indicated by the presence of: (1) the distribution of the points of the object of observation does not form a certain pattern (avoiding the pattern); (2) the points spread between, above, or below the centerline or can also be called point coordinates 0; (3) the points do not collect in certain parts, such as only below, or only above.

4. Autocorrelation Test

An autocorrelation test is a correlation test that occurs between objects under study where the objects are located sequentially or in a row. Usually, this happens in a futures test such as time-series data. The correlation itself is a structured analysis to partially determine the strength of a relationship between one variable and another research variable ([Nurdin, Sugiman, & Sunarmi, 2018](#)).

Hypothesis testing is a temporary answer to a problem that may be considered true and temporary due to it requires proof first. The hypothesis is basically a temporary conjecture that is considered the most correct, which is based on logical thinking and uses the knowledge window as a means of supporting it. In comparison, hypothesis testing is an action taken by the examiner through certain procedures and stages regarding the provisional assumption, which ultimately gives an answer to the examiner accepting or rejecting a hypothesis. In this study, to test a hypothesis, the researcher used the following test ([Hasan & Mufliha, 2020](#)).

In Univariate Analysis of Variance (UAV), the decision results are generated according to one test statistic, namely the F test, which has a value determined by the result of dividing by 2 the average addition of the squared value, for the estimated magnitude of the distribution of the estimated magnitude of the related variable. The Multivariate Analysis of Variance (MAV) has test statistics that can be used to produce decisions, including. Multivariate test statistics are used to assess the influence of independent variables on a model under different assumptions. Pillai's Trace is applied when the homogeneity of the variance-covariance matrix is not met, the sample size is small, or vector averages

are largely opposed; higher values indicate greater influence on the model. Wilk's Lambda is used for more than two groups of independent variables when homogeneity assumptions are satisfied, with smaller values reflecting stronger influence. Hotelling's Trace applies to two independent variable groups, where larger values indicate greater model influence, while Roy's Largest Root is used under variance-covariance homogeneity, also reflecting the strength of influence on the model.

3.6.3 Manova Test

The Manova test is a generalization of the analysis of variance for situations where there are several independent variables by measuring several dependent variables. Researchers can increase the likelihood of changes resulting from different treatments and different interactions but increase the complexity of the analysis. The advantage of MANOVA over a series of ANOVA for each dependent variable is protection against type 1 error. However, this advantage will be seen only when a two-tailed significance test is performed. However, if a one-sided test is desired, the use of MANOVA may result in an unacceptable loss of results. Like the ANOVA test, the MANOVA test is a test related to different variances. In ANOVA, the variance being compared comes from a related variable, while in MANOVA, the variance being compared comes from more than one related variable. This research will use SPSS 16.0 For Windows.

4. Results and Discussion

4.1 Data Analysis of Sharia Mutual Funds VS Mutual Funds

4.1.1 Normality test

Normality testing is carried out to see the variables used are normally distributed or not. The way to test for normality is the Kolmogorov-Smirnov test, with the following results:

Table 2. Kolmogorov Smirnov (normality test)

	Unstandardized Residual
asymp. Sig.	.125

Based on Table 2 the *asympt. Sig. (2-tailed)* sig value is 0.125, so it can be said that the data used in this study is normally distributed. Other normality tests can also show the results of the data being normally distributed or not. Namely by using the PP Plot test as follows:

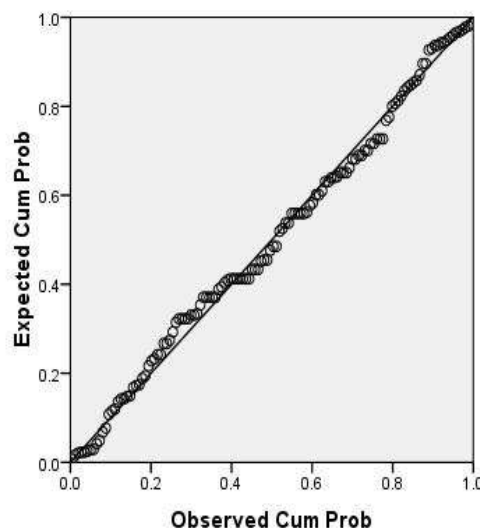


Figure 1. PP Plot normality test results

In the normality of the data with the Normal PP Plot on Figure 1, the data on the variables used are declared normal or close to normal. Variables are called normal when the SPSS distribution image is accompanied by data value points that are located spread around a diagonal line and the points spread

on the data in the same direction following a diagonal line. Thus, based on the Normal PP Plot image above, the data used is declared to be normally distributed.

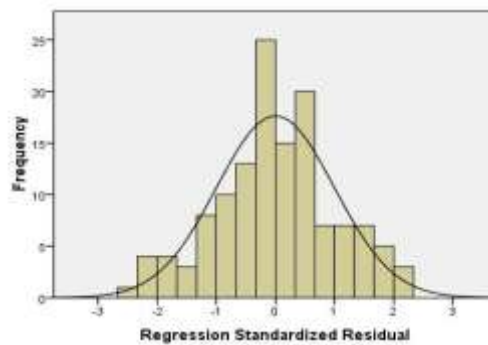


Figure 2. Histogram normality test results

Based on Figure 2 histogram normality test above, it can be seen that the shape is like a bell. So, based on the histogram image above, the data used is declared to be normally distributed.

4.1.2 Homogeneity Test

This homogeneity test was carried out using the F test (Levene's Test) to determine whether the variance of the two values was the same or (Mądra-Sawicka, Nord, Paliszkievicz, & Lee, 2020). If there is no significant difference between the two variances, use the variance to compare the population mean/test for Equality of Means using a t-test on Equal Variance Assumed.

Table 3. Homogeneity test

	Levene Statistics	Sig.
Mutual Fund Sharia	2.279	.132
Mutual Fund	3,545	.061

Based on Table 3 value of sig. for sharia mutual funds is 0.132 and mutual funds is 0.061, so H0 is accepted, and it can be said that based on the Sharpe and Jensen method for the 2010-2020 period, the performance of sharia mutual funds and mutual funds has the same variance.

4.1.3 Classical Assumption Test

The classical assumption needs to be done to ensure that the data under study is properly protected or protected from multicollinearity, heteroscedasticity and autocorrelation so that the resulting data can be processed and analyzed in the next stage according to the data analysis stage in this study (Shrestha, 2020).

1. Multicollinearity Test

Research that uses multiple regression analysis techniques between independent variables should not be correlated with each other, or multicorrelation occurs (Kibria & Lukman, 2020). Detection of the non-occurrence of multicorrelation can be seen in the collinearity statistic, provided that if the tolerance value of each independent variable is above 0.1, The results of the multicollinearity test can be seen in Table 4.

Table 4. Multicollinearity test results

Model		Collinearity	
		Tolerance	VIF
1	Mutual Funds	1.000	1.000
2	Sharia mutual funds	1.000	1.000

From the results of the multicollinearity test in Table 4, which was carried out on the research variables, there were no symptoms of multicollinearity due to it is known that the value of the Variance Inflation Factor (VIF) is 1,000 bonds and 1,000 Sukuk.

1. Heteroscedasticity Test

To test whether or not there is a problem with heteroscedasticity, namely using a scatterplot graph, the graph forms a special image pattern, so the model can be said to have heteroscedasticity. The results of the heteroscedasticity test are as follows:

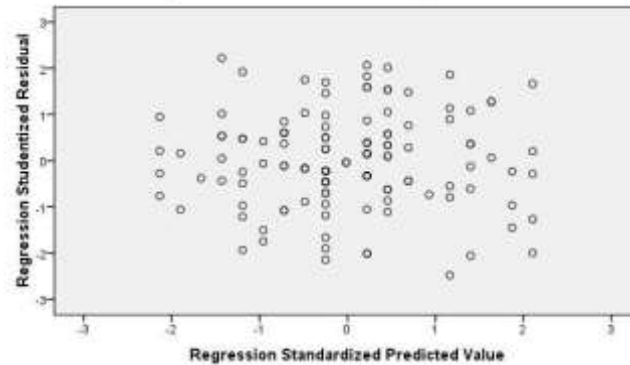


Figure 3. Heteroscedasticity test results

Figure 3 presents the results of the heteroscedasticity test using a scatterplot graph. The distribution of data points appears random and does not form a specific pattern, indicating that the regression model does not experience heteroscedasticity problems. Therefore, the model satisfies one of the classical assumption requirements for regression analysis (Alabi, Ayinde, Babalola, Bello, & Okon, 2020).

Table 5. Heteroscedasticity test results

Model		Sig.
1	(Constant)	.675
	Sharia mutual funds	.060
2	mutual funds	.092

Based on the Table 5 of the Glejser test above shows that the significant value has a value above 0.05. This can be seen from the sig value above for Islamic mutual funds that have a value of $0.060 > 0.05$ and mutual funds $0.092 > 0.05$. With the results of the Glejser test, it can be seen that the data is free from heteroscedasticity symptoms. So that testing can be carried out to the next stage.

2. Autocorrelation Test

This test is carried out to test whether there is a relationship between members of the observation located in a row. In order to test the presence of autocorrelation, the Durbin Watson or DW test can be used, provided that less than DW is less than 4-DU, then there is no autocorrelation. The following is the autocorrelation test:

Table 6. Autocorrelation test results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.852a	.725	.723	66862.18220	1.047

Table 6 show the test results using the Durbin-Watson test above, the Durbin Watson value is 1.047, so it can be concluded that there is no autocorrelation.

4.1.4 Hypothesis Testing

Test the hypothesis using Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root. The researcher can increase the likelihood of changes resulting from different treatments and interactions but increase the complexity of the analysis. How to test with the following results:

Table 7. Multivariate tests

	Effect	Sig.
Method	Pillai's Trace	.015
	Wilks' Lambda	.015
	Hotelling's Trace	.015
	Roy's Largest Root	.015

Table 7 show the value of the test results Pillai's Trace of 0.040 indicates the effect of the method is getting smaller, Wilks' Lambda of 0.960 indicates the effect of the method is getting bigger. Hotelling's Trace of 0.040 indicates the method is getting smaller and Roy's Largest Root of 0.040 indicates the method is getting smaller (Stock, van Emmerik, Wilson, & Preatoni, 2018). It can be concluded that there is no significant difference in the performance of mutual funds and sharia mutual funds using the Sharpe and Jensen method (H_0 = rejected and H_1 = accepted).

Table 8. Manova test pairwise comparison

Dependent Variable	(I) Method	(J) Method	Mean Difference (I-J)	Std. Error	Sig.
Mutual Fund Sharia	Sharpe	Jensen	0.894	0.496	0.073
Mutual Fund Sharia	Jensen	Sharpe	-0.894	0.496	0.073
Mutual Fund	Sharpe	Jensen	1.485*	0.486	0.063
Mutual Fund	Jensen	Sharpe	-1.485*	0.486	0.063

Table 8 show the results of the Manova test in the table above, it shows that for the Islamic mutual fund variable when compared to Sharpe and Jensen, there is no significant difference due to of the value of sig. both are greater than 0.05, which is 0.115 (Climent, Mollá, & Soriano, 2020). Furthermore, for the mutual fund variable, when compared with the Sharpe and Jensen methods, there is no significant difference due to of the sig values both are greater than 0.05, which is equal to 0.063. So partially for sharia mutual funds and mutual funds, the results are H_0 = rejected and H_1 = accepted.

4.2 Discussion

The results of the hypothesis test of this study indicate that H_0 is rejected and H_1 is accepted due to the significance value is less than 0.05, so that this study shows that there is no significant difference between the performance of Islamic mutual funds and mutual funds. Sharia mutual funds and mutual funds as a forum for collecting funds from the public will be managed by a legal entity, namely the Investment Manager.

This research is supported by the research of Purwanto in (Firdaus, 2019) by analyzing the performance of Islamic stock mutual funds using the Sharpe, Treynor, Jensen, M^2 , and TT methods. The result is that there are no sharia-based equity mutual funds that perform positively. The results of the study using the method of Sharpe, Treynor, and Jensen showed no significant difference. Research that supports the performance of sharia mutual funds vs mutual funds is research conducted by (Lestari & Supadmi, 2017) performance of Islamic stock mutual funds and conventional stock mutual funds. The results showed that the performance of conventional stock mutual funds was superior to the performance of Islamic stock mutual funds based on the Sharpe rv/s method of 11,900. The results show that there is no significant difference. The differences between this study and research from Sustainable is using the Sharpe method while this study uses the Sharpe and Jensen method. Investment performance in mutual fund portfolio management is reflected in the Net Asset Value (NAV). Whether or not the investment portfolio's performance managed by the investment manager is influenced by the policies and investment strategies undertaken. Therefore, in order to know the development of the investment value

of a mutual fund, it can be seen from the increase in the value of its net assets, which is also the investment value of the investor ([Hafizh, Syauqi, & Achmad, 2019](#)).

Therefore, the results of this study's hypothesis test indicate that H_0 is rejected and H_1 is accepted so that the performance of Islamic mutual funds with Sharpe and Jensen methods is no significant different. Where this research supports previous research and is strengthened by theory. This shows that the return on Islamic mutual funds and mutual funds based on the Sharpe and Jensen methods that will be received will be relatively the same. Investment performance in mutual fund portfolio management is reflected in the Net Asset Value (NAV). Whether or not the policies and investment strategies influence the performance of the investment portfolio managed by the investment manager undertaken ([Abdul-Rahim, Abdul-Rahman, & Ling, 2019](#)).

5. Conclusions

5.1 Conclusion

The results of this study indicate no significant difference in the performance of sharia mutual funds and mutual funds with the Sharpe and Jensen methods. This is indicated by H_1 , which is tested and accepted in the second hypothesis. This shows that the return on the performance of Islamic mutual funds and mutual funds based on the Sharpe and Jensen method that will be received will be relatively the same. Investment performance in mutual fund portfolio management is reflected in the Net Asset Value (NAV). Whether or not the investment portfolio's performance managed by the investment manager is influenced by the policies and investment strategies undertaken.

5.2 Research Limitations

This study has several limitations. First, the research only covers the period from 2010 to 2020 using monthly data, which may limit the comprehensiveness of the findings. Second, the number of samples and the scope of investment instruments examined remain limited. Therefore, the results may not fully represent the broader performance of sharia mutual funds and conventional mutual funds under different market conditions.

5.3 Suggestions and Directions for Future Research

Future research is expected to extend the observation period and involve a larger number of samples to obtain more comprehensive results. Further studies may also compare different types of investment instruments and apply additional performance measurement methods to enrich the analysis of investment management and capital market studies. Moreover, broader empirical investigations are needed to provide deeper insights into the performance evaluation of mutual funds under varying economic conditions.

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Authors Contributions

KNS contributed to conceptualization, data collection, methodology, and writing of the original draft. MS was responsible for supervision, formal analysis, and validation of the research findings. MM contributed to literature review, editing, manuscript revision, and final approval of the published version.

References

- Abdul-Rahim, R., Abdul-Rahman, A., & Ling, P.-S. (2019). Performance of shariah versus conventional funds: Lessons from emerging markets. *Journal of Nusantara Studies (JONUS)*, 4(2), 193-218. doi:<https://doi.org/10.24200/jonus.vol4iss2pp193-218>
- Agustin, I. A. (2019). *Evaluasi kinerja Exchange Traded Fund (ETF) sustainable and responsible investment (Sri-Kehati) erdasarkan Indeks Sri-Kehati dan IHSG*. Universitas Pancasakti Tegal.

- Aithal, A., & Aithal, P. (2020). Development and validation of survey questionnaire & experimental data—a systematical review-based statistical approach. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), 233-251. doi:<https://dx.doi.org/10.2139/ssrn.3724105>
- Alabi, O. O., Ayinde, K., Babalola, O. E., Bello, H. A., & Okon, E. C. (2020). Effects of multicollinearity on type I error of some methods of detecting heteroscedasticity in linear regression model. *Open Journal of Statistics*, 10(4), 664-677. doi:[10.4236/ojs.2020.104041](https://doi.org/10.4236/ojs.2020.104041)
- Alim, F. A., Mai, M. U., & Setiawan, S. (2021). Analisis Pengaruh Faktor Internal dan Faktor Eksternal terhadap Kinerja Reksa Dana Syariah Saham. *Journal of Applied Islamic Economics and Finance*, 1(2), 435-445. doi:<https://doi.org/10.35313/jaief.v1i2.2476>
- Arifin, M. R., & Nur, M. A. (2019). Stabilitas kinerja reksadana syariah dalam menghadapi gejolak makro ekonomi. *Indonesian Journal of Islamic Literature and Muslim Society*, 4(2). doi:<https://doi.org/10.22515/islimus.v4i2.2600>
- Aydiner, A. S., Tatoglu, E., Bayraktar, E., Zaim, S., & Delen, D. (2019). Business analytics and firm performance: The mediating role of business process performance. *Journal of Business Research*, 96, 228-237. doi:<https://doi.org/10.1016/j.jbusres.2018.11.028>
- Bareksa. (2021). Kemenkeu : Ekonomi Q1 Hanya 2,97 Persen Akibat Corona, Urgensi Bansos Meningkatkan. Retrieved from <https://www.Bareksa.Com/Berita/Id/Text/2020/05/05/Kemenkeu-Ekonomi-Q1-Hanya-297-Persen-Akibat-Corona-Urgensi-Bansos-Meningkat/24908/News>
- Climent, F., Mollá, P., & Soriano, P. (2020). The investment performance of US Islamic mutual funds. *Sustainability*, 12(9), 3530. doi:<https://doi.org/10.3390/su12093530>
- Firdaus, A. (2019). Performance Analysis of Sharia Equity Fund in Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*. doi:[10.18551/rjoas.2019-05.15](https://doi.org/10.18551/rjoas.2019-05.15)
- Hafizh, A., Syauqi, B. I., & Achmad, F. (2019). Performance analysis of sharia equity fund in Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 89(5), 130-134. doi:[10.18551/rjoas.2019-05.15](https://doi.org/10.18551/rjoas.2019-05.15)
- Hasan, N. I., & Mufliha, N. M. (2020). The influence of ZIS fund distribution, social aid shopping, and subsidy shopping to poverty in Indonesia. *Indonesian Journal of Islamic Economics Research*, 2(1), 46-55. doi:<https://doi.org/10.18326/ijier.v2i1.4296>
- Iqbal, M. H. (2013). *Research Data Analysis With Statistics 2nd Edition*. Jakarta: Bumi Aksara.
- Kibria, B. G., & Lukman, A. F. (2020). A new ridge-type estimator for the linear regression model: simulations and applications. *Scientifica*, 2020(1), 9758378. doi:<https://doi.org/10.1155/2020/9758378>
- Knobel, A. (2019). Beneficial ownership in the investment industry: A strategy to roll back anonymous capital. Available at SSRN 3470358. doi:<https://dx.doi.org/10.2139/ssrn.3470358>
- Lestari, N. K. L., & Supadmi, N. L. (2017). Pengaruh pengendalian internal, integritas dan asimetri informasi pada kecurangan akuntansi. *E-Jurnal Akuntansi Universitas Udayana*, 21(1), 389-417. doi:<https://doi.org/10.24843/EJA.2019.v28.i03.p12>
- Liu, Y., Lee, J. M., & Lee, C. (2020). The challenges and opportunities of a global health crisis: the management and business implications of COVID-19 from an Asian perspective. *Asian Business & Management*, 19(3), 277. doi:<https://doi.org/10.1057/s41291-020-00119-x>
- Mądra-Sawicka, M., Nord, J. H., Paliszkievicz, J., & Lee, T.-R. (2020). Digital media: Empowerment and equality. *Information*, 11(4), 225. doi:<https://doi.org/10.3390/info11040225>
- Muhammad, H., Sari, N. P., & Nafisa, A. (2021). Performances of Sharia Mutual Funds in Indonesia: Empirical Evidence from a Developing Economy. *European Journal of Islamic Finance*(18). doi:<https://doi.org/10.13135/2421-2172/5896>
- Nurdin, I., Sugiman, S., & Sunarmi, S. (2018). Penerapan kombinasi metode ridge regression (RR) dan metode generalized least square (GLS) untuk mengatasi masalah multikolinieritas dan autokorelasi. *Indonesian Journal of Mathematics and Natural Sciences*, 41(1), 58-68. doi:<https://doi.org/10.15294/ijmns.v41i1.16384>
- O'Connor, S. (2020). Secondary data analysis in nursing research: a contemporary discussion (Vol. 29, pp. 279-284): Sage Publications Sage CA: Los Angeles, CA.
- Quadratullah, M. F. (2019). Treynor ratio to measure islamic stock performance in Indonesia. *Jurnal Fourier*, 8(1), 1-13. doi:<https://doi.org/10.14421/fourier.2019.81.1-13>
- Reksoatmodjo, R. N. (2019). *Statistics for psychology and education*. Bandung: PT. Refika Aditama.

- Robiyanto, R., Santoso, M. A., & Ernayani, R. (2019). Sharia mutual funds performance in Indonesia. *Business: Theory and Practice*, 20, 11-18. doi:<https://doi.org/10.3846/btp.2019.02>
- Sari, K. N., Sulchan, M., & Mutamimah, M. (2021). Performance comparison of mutual funds and sharia mutual funds. *Bukhori: Kajian Ekonomi dan Keuangan Islam*, 1(1), 65-77. doi:<https://doi.org/10.35912/bukhori.v1i1.600>
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics And Statistics*, 8(2), 39-42. doi:<https://doi.org/10.12691/ajams-8-2-1>
- Stock, H., van Emmerik, R., Wilson, C., & Preatoni, E. (2018). Applying circular statistics can cause artefacts in the calculation of vector coding variability: A bivariate solution. *Gait & Posture*, 65, 51-56. doi:<https://doi.org/10.1016/j.gaitpost.2018.06.169>
- Su, X., Xu, A., Lin, W., Chen, Y., Liu, S., & Xu, W. (2020). Environmental leadership, green innovation practices, environmental knowledge learning, and firm performance. *Sage Open*, 10(2), 2158244020922909. doi:<https://doi.org/10.1177/2158244020922909>
- Sugiyono. (2014). *Quantitative, Qualitative And Rnd Research Methods, 20th Edition*. Bandung: Alfabet.
- Van Ho, T. L., & Alshaleel, M. K. (2018). The mutual fund industry and the protection of human rights. *Human Rights Law Review*, 18(1), 1-29. doi:<https://doi.org/10.1093/hrlr/ngx042>
- Yoshino, N., Taghizadeh-Hesary, F., & Nakahigashi, M. (2019). Modelling the social funding and spill-over tax for addressing the green energy financing gap. *Economic Modelling*, 77, 34-41. doi:<https://doi.org/10.1016/j.econmod.2018.11.018>