COMPARATIVE ANALYSIS OF THE PERFORMANCE OF SHARIA MIXED MUTUAL FUNDS AND CONVENTIONAL MIXED MUTUAL FUNDS

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Abstract

This study aims to compare the performance of mixed Islamic mutual funds and conventional mixed mutual funds using the Sharpe, Treynor, Jensen, m-square, and information ratio index methods from 2012 to 2022. In this study, 6 samples of mixed Islamic mutual funds and 6 samples of mixed mutual funds were used. conventional. The results of the research on the performance of Islamic mixed mutual funds were able to compete competitively with conventional mixed mutual funds and when the t-test of the three methods was carried out, there were no significant differences, namely Sharpe, Treynor, and Jensen. There are differences in the methods that obtain results, namely m-square and information ratio. The results of this study can be used as a reference for future researchers who wish to conduct similar research to conduct research on how to improve the performance of mixed Islamic mutual funds so that they can equal or exceed the performance of conventional mixed mutual funds. And future researchers can also conduct research on finding ways to educate the public that mixed sharia mutual funds are better in terms of Islamic law.

Keywords: Mutual funds, mix, performance, different t-test

INTRODUCTION

Currently, the capital market plays a very important role in the economy because this market performs two functions, namely economic functions and financial functions. The economic function of the capital market is to provide a means that brings together parties who have excess funds (investors) with parties who need funds (issuers). Meanwhile, the capital

market is said to have a financial function because it provides the possibility of obtaining returns for its owners in accordance with the characteristics of the investment chosen.

The capital market itself according to Capital Market Law No.8 of 1995 is an activity related to the public offering and trading of securities, public companies related to the securities they issue, as well as institutions or professions related to securities. Securities are securities in theform of: stocks, bonds, proof of rights, proof of warrants, and their derivative products or commonly called derivatives (Mohamad Samsul, 2015: 57). One of the things traded in the capital market is mutual funds.

According to Law No. 8 of 1995 article 1 paragraph 27 concerning capital markets, mutual funds are containers used to raise funds from the investor community to be invested in securities portfolios by investment managers. Mutual funds are an alternative investment for investors, especially small investors who do not have much expertise and time to calculate their investment risks, but have the capital and desire to invest. The development of mutual fund products is very dynamic, this is shown by the issuance of Islamic mutual fund products which aim to provide more choices to investors who want to invest in accordance with sharia principles as recommended in Islamic teachings.

The issuance of Islamic mutual fund products does not rule out the possibility of differences in the performance of these mutual funds, both the performance of Islamic mutual funds and conventional mutual funds. With the difference in performance from both, potential investors become indecisive to choose a good mutual fund product to invest their funds. In this regard, it is necessary to measure mutual fund performance to provide guidance to potential investors who want to invest their funds in mutual funds. To find out how mutual funds perform, investors need to compare a mutual fund with other mutual funds. The methods used are Sharpe, Treynor, Jensen, M-Square, and Information Ratio.

(Vince Ratnawati et al., 2012) conducted research on the comparison of the performance of Islamic mutual funds and conventional mutual funds. The results showed that the performance of Islamic and conventional mutual funds is different, but not significant. In business terms, the performance of Islamic mutual funds is no less profitable than conventional mutual funds, and religiously more accountable, because it carries out a series of processes in accordance with sharia principles.

(Amal Hamzah et al., 2014) conducted research on comparative analysis of the performance of Islamic mutual funds with conventional mutual funds of stock types in the period 2008 - 2012. Comparison of the two types of mutual funds is measured through return, risk, mutual fund performance, and the ability of the Investment Manager between the two types of mutual funds. The results showed that in general there was no significant difference between sharia equity mutual funds and conventional equity mutual funds.

Research (Aprilia Grace Rumintang et al, 2015) entitled "comparative analysis of the performance of conventional stock mutual funds and Islamic stock mutual funds using sharpe, treynor, and jensen methods in 2014" reaped the results, namely, The results of research using Sharpe, and Treynor methods show the performance of conventional and Islamic stock mutual funds has performance above the performance of risk-free investments (in this study SBI and SBIS). Using the Jensen index method, there is only one mutual fund in the sharia type that has negative performance. This shows that only the investment manager has poor performance.

(Elliv Hidayatul Lailiyah et al, 2016) examined the "Comparative Analysis of ShariaMutual Fund Performance". The results of data analysis show that Conventional Mutual Funds have better performance than Sharia Mutual Funds when using calculations with Sharpe, Treynor and AUM growth methods. Meanwhile, if using the Jensen method, Sharia Mutual Funds have better performance than Conventional Mutual Funds.

Research (Faizal Ridwan Zamzany et al., 2018) on "a comparative study of the performance of conventional and sharia equity mutual funds in Indonesia" states that the results of research using the Sharpe, Treynor and Jensen methods show the performance of conventional and sharia equity mutual funds has performance above risk-free investment performance. With the three results of these methods, it can be seen that the performance of conventional and Islamic stock mutual funds does not have a significant difference.

This research aims to continue and emphasize previous research. And the research that the author does is expected to provide an overview to all parties in need so that it can be used as a guideline.

LITERATURE REVIEW

Mutual Fund

Definition of Mutual Fund

According to Law No. 8 of 1995 concerning the Capital Market, mutual funds are containers used to collect funds from the investor community to be invested in securities portfolios by investment managers. From the above definition, mutual funds can be understood as a place where people can invest their funds and by the manager, namely the investment manager, the funds are invested in a securities portfolio.

Islamic mutual funds are mutual funds that operate in accordance with the provisions and principles of Islamic sharia, both in the form of contracts between investors as property owners (sahib al-mal /rabb al-mal) and investment managers as representatives of sahib al-mal and investment users. Thus, Islamic mutual funds are mutual funds whose management and investment policies refer to Islamic sharia. (Andri Soemitra, 2017: 158).

Mutual Fund Types

a. Money Market Mutual Fund

Money market mutual funds are mutual funds that invest in debt securities with maturities of less than 1 year. Money market mutual funds do not charge sales and redemption fees. The term sales charge and redemption fee is viewed from the mutual fund's point of view. (Mohamad Samsul, 2015: 418).

b. Fixed Income Mutual Fund

A fixed income fund is a mutual fund that invests at least 80%/o of its assets in monetary securities. Fixed income funds have relatively stable prices over all economic cycles. (Mohamad Samsul, 2015:418).

c. Equity Mutual Fund

An equity fund is a mutual fund that invests at least 80%/o of its assets in equity securities. Equity funds are the most difficult funds to adjust to economic cycles. (Mohamad Samsul, 2015:419).

d. Balanced Mutual Fund

Balanced funds are mutual funds that invest in equity and debt securities to a lesser extent than equity funds or fixed income funds. Balanced funds are the most flexible in adjusting to any economic conditions, as they can make drastic shifts from stocks to bonds

or from bonds to stocks. (Mohamad Samsul, 2015:419).

Portfolio Performance Evolution

Portfolio performance evaluation is the final stage of the investment management process which aims to assess whether the portfolio that has been formed has good performance and is in accordance with investment objectives. (Vince Ratnawati et al., 2013: 97). Some of the portfolio performance measures used are the Sharpe index, Treynor index, Jensen index, M-Square, and Information Ratio:

1. Sharpe Index

The Sharpe Index is a measure of portfolio performance developed by William Sharpe (1966). Measurement by the Sharpe method is based on the so-called premium or risk "Risk Premium" (Vince Ratnawati et al., 2013: 97). The sharpe index formula is :

$$Si = \frac{Ri - Rf}{\sigma i}$$

Where :

S_i = Sharpe index mutual fund i

R_i = return mutual fund i

R_f = return risk free rate

σi = Standard deviation of mutual funds i

2. Treynor Index

The Treynor index is a measure of portfolio performance developed by Jack Treynor (1965). Treynor measurement is basically the same as Sharpe measurement, the difference is that beta (β) acts as a divisor. (Gratia Atanka et al., 2013: 13). The Treynor index is formulated as follows :

$$Ti = \frac{Ri - Rf}{\beta i}$$

Where :

T_i= Treynor index mutual fund

R_i= return mutual fund i

R_F= return risk free rate

β = Marker beta i

3. Jensen Alpha

Jensen alpha was developed by E. Michael Jensen in 1968 which emphasizes the difference between the actual rate of return earned by the portfolio and the expected rate of return if the portfolio is on the capital market line. (Gratia Atanka et al., 2013: 14). Jensen alpha is formulated as follows :

$$\alpha p = Rp - [Rf + \beta p(Rm - Rf)]$$

Where :

αp = Jensen's Alpha

Rp = return portfolio (Mutual fund)

Rf = returnrisk free rate

βp= Beta portfolio

Rm = Market Return

4. M-square

The M-square method is a development of the Sharpe method. Obtained from the Sharpe calculation which is then multiplied by the market standard deviation and added to the risk-free interest rate which is then reduced by the market return (Candra Saksama et al., 2013: 362). The formula used is as follows :

$$M^2 = \frac{Ri - Rf}{\sigma i} x\ Rm + Rf$$

Where :

M^2 = M-Square

Rp = Mutual Fund average return

Rf = Average return on risk-free investment

σp = Standard deviation of Mutual Fund

Rm = Market average return

5. Information Ratio (IR)

Information Ratio (appraisal ratio) This measurement is the ratio between alpha and the portfolio's unique risk or the portfolio's non-systematic risk, which is referred to as the industry's tracking error. (Candra Saksama et al., 2013: 363). The formula used is as follows :

$$IR = \frac{a}{\sigma i - b}$$

Where :

IR = Information Ratio

α = Jensen Alpha Value

σi – b = Difference in standard deviation of mutual funds

RESEARC METHODOLOGY

This research is a type of quantitative research. The data source used in this research is secondary data. The population in this study were sharia mixed mutual funds and conventional mixed mutual funds registered during the observation year, namely from 2012-2022. The sample used in this study was purposive sampling with the criteria that the mutual funds used were mixed type mutual funds, mutual funds registered with the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX) in 2012-2022, sharia mixed mutual funds and conventional mixed mutual funds that had the highest NAV in the 4th quarter of 2022. So that 12 research samples were obtained, 6 conventional mutual funds and 6 Islamic mutual funds.

The test conducted is to test the difference in performance of conventional mixed mutual funds and sharia mixed mutual funds. The t-test is used to determine whether two unrelated or unpaired samples have different mean values. The two samples are said to be significantly different if the significance value is less than 5%.

RESULDS AND DISCUSSION

1. Sharpe Method

The Sharpe Index measurement is a measure of portfolio performance developed by William Sharpe (1966). Measurement by the Sharpe method is based on what is called a premiumor risk "Risk Premium" (Vince Ratnawati et al., 2013: 97).

Sharpe Index Calculation of Sharia and Conventional Mixed Mutual Funds 2012-2022

No	Shariah-compliant mixed funds	Average
1	Danareksa syariah berimbang	-0,1428
2	Mandiri investa syariah berimbang	-0,1706
3	PNM Syariah	-0,02
4	Sam Syariah Berimbang	-0,0531
5	Schroder Syariah Balanced Fund	0,0033
6	Trim Syariah Berimbang	0,0715

Source: Data processed by researchers

No	Conventional mutual funds	Average
1	FWD Asset Aggressive Balanced Fund	0,0036
2	Panin Dana Bersama	0,0114
3	Panin Dana Unggulan	0,0589
4	SAM Dana Berkembang	0,0451
5	Simas Satu	0,0205
6	Sucorinvest Flexi Fund	0,0831

Source: Data processed by researchers

Based on the results of measuring the performance of Islamic mixed mutual funds and conventional mixed mutual funds using the sharpe method from 2012 to 2022, the average Islamic mixed mutual funds and conventional mixed mutual funds are known to have no effective or stable increase. This is known after calculating using the sharpe formula, namely mutual fund return minus return risk free rate then divided by mutual fund standard deviation. After the sharpe calculation is done and it can be seen that the annual average does not have a steady increase or can be said to change, for example in 2012 the average is positive and in 2013 it is negative and so on until 2022.

After obtaining the average from the sharpe calculation, then the independent sample t test can be carried out (if the data is normally distributed, the sig value is> 0.05 (Slamet Riyanto, 2020: 137)) or the mann whitney test (if the data is not normally distributed, the sig value is <0.05).

After the normality test is carried out, a homogeneity test is also carried out, the homogeneity test is used to determine whether some population variants are the same or not. This test is a prerequisite for independent sample t test and anova analysis (Usmadi, 2020: 61).

a. The results of the normality test using Kolmogorov Smirnov are normally distributed because the Sig value. 0,200 > 0.05

Sharpe	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Syariah	,174	6	,200*
Konvensional	,206	6	,200*

Source: Data processed by researchers

b. The homogeneity test results show that the Sig. value on the sharpe method mutual fund is 0.056> 0.05.

	Levene Statistic	df1	df2	Sig.
Based on Mean	4,682	1	10	,056
Based on Median	4,186	1	10	,068
Based on Median and with adjusted df	4,186	1	5,733	,089
Based on trimmed mean	4,681	1	10	,056

Source: Data processed by researchers

c. The results of the independent sample t test of the sharpe method have a sig value. 0.047 < 0.05

		F	Sig.	T	df	Significance	
						One-Sided p	Two-Sided p
Sharpe	Equal variances assumed	4,682	,056	-2,265	10	,023	,047
	Equal variances not assumed			-2,265	6,117	,032	,063

Source: Data processed by researchers

After the independent sample t test, the sharpe method has a sig value. 0.047 <0.05, it means that H0 is rejected and H_1 is accepted or there is a significant difference between Islamic

mutual funds and conventional mutual funds using the sharpe method. William Sharpe (1966) also said the sharpe method is based on what is called "Risk Premium". Risk Premium is the difference (difference) between the average performance generated by mutual funds and the average performance of risk-free investments (risk free assets).

2. Treynor Method

The Treynor Index measurement is a portfolio performance measure developed by Jack Treynor (1965). Treynor measurement is basically the same as Sharpe measurement, the difference is that beta (β) acts as a divisor. (Gratia Atanka et al., 2013: 13).

Calculation of Treynor Index of Sharia and Conventional Mixed Mutual Funds 2012-2022

No	Shariah-compliant mixed funds	Average
1	Danareksa syariah berimbang	-0,0479
2	Mandiri investa syariah berimbang	-0,1341
3	PNM Syariah	-0,0208
4	Sam Syariah Berimbang	-0,343
5	Schroder Syariah Balanced Fund	0,0116
6	Trim Syariah Berimbang	-0,0126

Source: Data processed by researchers

No	Conventional mixed funds	Average
1	FWD Asset Aggressive Balanced Fund	-0,0384
2	Panin Dana Bersama	0,0205
3	Panin Dana Unggulan	0,0085
4	SAM Dana Berkembang	0,0106
5	Simas Satu	-0,0202
6	Sucorinvest Flexi Fund	0,1011

Source: Data processed by researchers

Based on the results of measuring the performance of Islamic mixed mutual funds and conventional mixed mutual funds using the Treynor method from 2012 to 2022, the average Islamic mixed mutual funds and conventional mixed mutual funds are known to have noeffective or stable increase. This is known after calculating using the treynor formula, namely

mutual fund return minus return risk free rate and then divided by market beta. After the treynor calculation is done and it can be seen that the annual average does not have a steady increase or can be said to be changing, for example in 2012 the average is positive and in 2013 it is negative and so on until 2022.

After obtaining the average from the Treynor calculation, then the independent sample t test can be carried out (if the data is normally distributed, the sig value is> 0.05 (Slamet Riyanto, 2020: 137).) or the mann whitney test (if the data is not normally distributed, the sig value is <0.05). After the normality test is carried out, a homogeneity test is also carried out, the homogeneity test is used to determine whether some population variants are the same or not. This test is a prerequisite for independent sample t test and anova analysis (Usmadi, 2020: 61).

a. The results of the normality test using Kolmogorov Smirnov are normally distributed because the Sig values. 0.115 and 0.167 > 0.05

Treynor	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Syariah	,294	6	,115
Konvensional	,277	6	,167

Source: Data processed by researchers

b. The homogeneity test results show that the Sig. value on the sharpe method mutual fund is 0.084> 0.05.

		Levene Statistic	df1	df2	Sig.
Treynor	Based on Mean	3,671	1	10	,084
	Based on Median	1,190	1	10	,301
	Based on Median and with adjusted df	1,190	1	5,924	,318
	Based on trimmed mean	3,112	1	10	,108

Source: Data processed by researchers

c. The results of the Treynor method independent sample t test have a sig value. 0.100 > 0.05

		F	Sig.	T	df	Significance	
						One-Sided p	Two-Sided p
Treynor	Equal variances assumed	3,671	,084	-1,812	10	,050	,100
	Equal variances not assumed			-1,812	6,283	,059	,118

Source: Data processed by researchers

After the independent sample t test, the Treynor method has a sig value. 0.100> 0.05, it means that H0 is accepted and H_2 is rejected or there is no significant difference between Islamic mutual funds and conventional mutual funds with the Treynor method.

3. Jensen Method

Jensen alpha was developed by E. Michael Jensen in 1968 which emphasizes the difference between the actual rate of return earned by the portfolio and the expected rate of return if the portfolio is on the capital market line. (Gratia Atanka et al., 2013:14).

Calculation of Jensen Alpha of Sharia and Conventional Mixed Mutual Funds 2012-2022

No	Shariah-compliant mixed funds	Average
1	Danareksa syariah berimbang	0,0337
2	Mandiri investa syariah berimbang	0,0365
3	PNM Syariah	0,0559
4	Sam Syariah Berimbang	0,0369
5	Schroder Syariah Balanced Fund	0,0602
6	Trim Syariah Berimbang	0,535

Source: Data processed by researchers

No	Conventional mixed funds	Average
1	FWD Asset Aggressive Balanced Fund	0,0312
2	Panin Dana Bersama	0,065
3	Panin Dana Unggulan	0,059
4	SAM Dana Berkembang	0,0571
5	Simas Satu	0,083
6	Sucorinvest Flexi Fund	0,0884

Source: Data processed by researchers

Based on the results of measuring the performance of Islamic mixed mutual funds and conventional mixed mutual funds using the Jensen method from 2012 to 2022, the average Islamic

mixed mutual funds and conventional mixed mutual funds are known to have no effective or stable increase. This is known after calculating using the Jensen formula, namely mutual fund return minus the sum of the Return Risk Free Rate plus Beta multiplied by the result of the sum of Market Return minus Return Risk Free Rate. After the treynor calculation is done and it can be seen that the annual average does not have a steady increase or can be said to be changing, for example in 2012 the average is positive and in 2013 it is negative and so on until 2022.

After obtaining the average from the Jensen calculation, then the independent sample t test can be carried out (if the data is normally distributed, the sig value is> 0.05 (Slamet Riyanto, 2020: 137).) or the mann whitney test (if the data is not normally distributed, the sig value is <0.05). After the normality test is carried out, a homogeneity test is also carried out, the homogeneity testis used to determine whether some population variants are the same or not. This test is a prerequisite for independent sample t test and anova analysis (Usmadi, 2020: 61).

a. The results of the normality test using Kolmogorov Smirnov are not normally distributed because the Sig values. 0.001 and 0.200, meaning that one has a value <0.05

Jensen	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Syariah	,463	6	<,001
Konvensional	,203	6	,200*

Source: Data processed by researchers

b. The homogeneity test results show that the Sig. value on the Jensen method mutual fund is 0.052> 0.05.

		Levene Statistic	df1	df2	Sig.
Jensen	Based on Mean	4,885	1	10	,052
	Based on Median	,904	1	10	,364
	Based on Median and with adjusted df	,904	1	5,042	,385
	Based on trimmed mean	3,261	1	10	,101

Source: Data processed by researchers

c. The results of the Mann Whitney test of the Jensen method have a sig value. 0.485 > 0.05

	Jensen
Mann-Whitney U	13,000
Wilcoxon W	34,000
Z	-,801
Asymp. Sig. (2-tailed)	,423
Exact Sig. [2*(1-tailed Sig.)]	,485[b]

Source: Data processed by researchers

The results of the Mann Whitney test of the Jensen method have a sig value. 0.485> 0.05, meaning that H0 is accepted and H_3 is rejected or there is no significant difference between Islamic mutual funds and conventional mutual funds using the Jensen method. In addition to the mann whitney test results which state that there is no significant difference, E. Michael Jensen (1968) also emphasizes the difference between the actual level of return obtained by the portfolio and the expected level of return if the portfolio is on the capital market line. It can be concluded that the difference still exists when viewed from the level of return but is not significant.

4. M-square Method

M-square is obtained from calculating Sharpe which is then multiplied by the market standard deviation and added by the risk-free interest rate which is then reduced by the market return. If the average value> 0.05 then it has a positive performance. (Candra Saksama et al., 2013: 362).

M-square Calculation of Sharia and Conventional Mutual Funds 2012-2022

No	Shariah-compliant mixed funds	Average
1	Danareksa syariah berimbang	0,0521
2	Mandiri investa syariah berimbang	0,0406
3	PNM Syariah	0,0544
4	Sam Syariah Berimbang	0,0542
5	Schroder Syariah Balanced Fund	0,0544
6	Trim Syariah Berimbang	0,0554

Source: Data processed by researchers

No	Conventional mixed funds	Average
1	FWD Asset Aggressive Balanced Fund	0,053
2	Panin Dana Bersama	0,0563
3	Panin Dana Unggulan	0,0561

4	SAM Dana Berkembang	0,057
5	Simas Satu	0,0565
6	Sucorinvest Flexi Fund	0,0606

Source: Data processed by researchers

Based on the results of measuring the performance of Islamic mixed mutual funds and conventional mixed mutual funds using the m-square method from 2012 to 2022, the average Islamic mixed mutual funds and conventional mixed mutual funds are known to have noeffective or stable increase. This is known after calculating using the m-square formula, namelymutual fund return minus Return Risk Free Rate divided by Standard Deviation multiplied by Market Average Return plus Return Risk Free Rate. After calculating m-square and it can be seenthat the annual average does not have a steady increase or can be said to change, for example in2012 the average is positive and in 2013 it is negative and so on until 2022.

After obtaining the average from the M-square calculation, then the independent sample t test can be carried out (if the data is normally distributed, the sig value is> 0.05 (Slamet Riyanto, 2020: 137)) or the mann whitney test (if the data is not normally distributed, the sig value is <0.05).After the normality test is carried out, a homogeneity test is also carried out, the homogeneity test is used to determine whether some population variants are the same or not. This test is a prerequisite for independent sample t test and anova analysis (Usmadi, 2020: 61).

a. The results of the normality test using Kolmogorov Smirnov are not normally distributed because the Sig values. 0.020 and 0.200, meaning that one has a value <0.05

M-square	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Syariah	,351	6	,020
Konvensional	,265	6	,200*

Source: Data processed by researchers

b. The homogeneity test results show that the Sig. value on the m-square method mutual fund is 0.218> 0.05.

		Levene Statistic	df1	df2	Sig.
Msquare	Based on Mean	1,726	1	10	,218
	Based on Median	,383	1	10	,550
	Based on Median and with adjusted df	,383	1	6,169	,558
	Based on trimmed mean	1,255	1	10	,289

Source: Data processed by researchers

c. The results of the Mann Whitney test M-square method have a sig value. 0.026 < 0.05

	Msquare
Mann-Whitney U	4,000
Wilcoxon W	25,000
Z	-2,246
Asymp. Sig. (2-tailed)	,025
Exact Sig. [2*(1-tailed Sig.)]	,026[b]

Source: Data processed by researchers

The results of the Mann Whitney test M-square method have a sig value. 0.026 <0.05, meaning that H0 is rejected and H_4 is accepted or there is a significant difference between Islamic mutual funds and conventional mutual funds with the M-square method. M-square is basically an extension method of the sharpe method, meaning that the results after the test are not different from sharpe.

5. Information Ratio Method

Information Ratio (appraisal ratio) This measurement is the ratio between alpha and the unique risk of the portfolio or the non-systematic risk of the portfolio called the tracking error of the industry. If the average value is > 0.05 then it has positive performance. (Candra Saksama etal., 2013:363).

Calculation of Information Ratio of Sharia and Conventional Mixed Mutual Funds 2012-2022

No	Shariah-compliant mixed funds	Average
1	Danareksa syariah berimbang	0,0601
2	Mandiri investa syariah berimbang	0,3318
3	PNM Syariah	0,0931
4	Sam Syariah Berimbang	0,0527

5	Schroder Syariah Balanced Fund	0,1368
6	Trim Syariah Berimbang	0,6445

Source: Data processed by researchers

No	Reksadana campuran konvensional	Rata-rata
1	FWD Asset Aggressive Balanced Fund	0,0624
2	Panin Dana Bersama	0,0656
3	Panin Dana Unggulan	0,0797
4	SAM Dana Berkembang	0,0839
5	Simas Satu	0,1317
6	Sucorinvest Flexi Fund	0,136

Source: Data processed by researchers

Based on the results of measuring the performance of Islamic mixed mutual funds and conventional mixed mutual funds using the information ratio method from 2012 to 2022, the average Islamic mixed mutual funds and conventional mixed mutual funds are known to have no effective or stable increase. This is known after calculating using the information ratio formula, namely Jensen value divided by standard deviation. After the treynor calculation is carried out and it can be seen that the annual average does not have a steady increase or can be said to change, for example in 2012 the average is positive and in 2013 it is negative and so on until 2022.

After obtaining the average from the M-square calculation, then the independent sample t test can be carried out (if the data is normally distributed, the sig value is> 0.05 (Slamet Riyanto, 2020: 137).) or the mann whitney test (if the data is not normally distributed, the sig value is <0.05). After the normality test is carried out, a homogeneity test is also carried out, the homogeneity test is used to determine whether some population variants are the same or not. This test is a prerequisite for independent sample t test and anova analysis (Usmadi, 2020: 61).

a. The results of the normality test using Kolmogorov Smirnov are normally distributed because the Sig values. 0.082 and 0.157 > 0.05

	Kolmogorov-Smirnov		
IR	Statistic	Df	Sig.

Syariah	,306	6	,082
Konvensional	,279	6	,157

Source: Data processed by researchers

b. The homogeneity test results show that the Sig. value on the information ratio method mutual fund is 0.014 <0.05.

		Levene Statistic	df1	df2	Sig.
IR	Based on Mean	8,840	1	10	,014
	Based on Median	2,419	1	10	,151
	Based on Median and with adjusted df	2,419	1	5,132	,179
	Based on trimmed mean	7,260	1	10	,023

Source: Data processed by researchers

c. The results of the independent sample t test of the Information Ratio method have a sig value. 0.241 > 0.05

		F	Sig.	T	df	Significance	
						One-Sided p	Two-Sided p
IR	Equal variances assumed	8,840	,014	1,323	10	,108	,215
	Equal variances not assumed			1,323	5,196	,120	,241

Source: Data processed by researchers

The results of the independent sample t test of the Information Ratio method have a sig value. 0.241> 0.05, meaning that H0 is accepted and H_5 is rejected or there is no significant difference between Islamic mutual funds and conventional mutual funds using the Information Ratio method. Since this method is an extension method of the Jensen method, the results of the test will not be different.

CONCLUCIONS

In the calculation of the average sharpe of 6 mixed Islamic mutual funds from 2012 to 2022, there are two types of mutual funds that have a positive value, namely Schroder Syariah Balanced Fund and Trim Syariah Balanced. In the calculation of treynor Islamic mixed mutual funds that have a positive value, namely Schroder Syariah Balanced Fund. In the calculation of Jensen Islamic mixed mutual funds have all positive values. In the calculation of M-square, Islamic

mixed mutual funds that have a positive value are all samples. In the calculation of Information Ratio, all Islamic mixed mutual funds have a positive value.

In the calculation of the average sharpe of 6 sharia mixed mutual funds from 2012 to 2022, the calculation of the average sharpe of conventional mixed mutual funds all samples have a positive value. In the calculation of the average treynor of conventional mixed mutual funds there are three, namely Panin Dana Bersama, SAM Dana Berkembang, and Sucorinvest Flexi Fund. Jensen calculation of conventional mixed mutual funds has a positive value. In the calculation of M-square, conventional mixed mutual funds that have positive values are all samples. In the calculation of Information Ratio, conventional mixed mutual funds have all positive values.

The results of the independent sample t test of the sharpe method have a sig value. 0.047 <0.05 then H0 is rejected and H1 is accepted or there is a significant difference between conventional mixed mutual funds and conventional mixed mutual funds. The results of the Treynor method independent sample t test have a sig value. 0.100> 0.05 then H0 is accepted and H1 is rejected or there is no significant difference. The results of the Mann Whitney test of the Jensen method have a sig value. 0.485> 0.05 then H0 is accepted and H1 is rejected or there is no significant difference. The results of the Mann Whitney test M-square method have a sig value. 0.026 <0.05 then H0 is rejected and H1 is accepted or there is a significant difference. The results of the independent sample t test of the Information Ratio method have a sig value. 0.241 > 0.05 then H0 is accepted and H1 is rejected or there is no significant difference.

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