

ISLAMIC AND CONVENTIONAL MUTUAL FUNDS PERFORMANCE BY RETURN AND RISK ADJUSTED PERFORMANCE

Elmanizar and Erythrina Aveliasari

Universitas YARSI

Jl. Let. Jend. Suprpto. Cempaka Putih, Jakarta Pusat, DKI Jakarta, Indonesia. 10510

Email: elmanizar@yarsi.ac.id

ABSTRAK

Penelitian ini membandingkan kinerja reksa dana syariah dan konvensional dari tahun 2017 sampai dengan 2021 dengan tujuan untuk menganalisis perbedaannya. Penelitian ini memanfaatkan data sekunder dari Otoritas Jasa Keuangan (OJK) selama 5 tahun yang diunduh dari website resmi OJK. Purposive sampling digunakan dalam metode pengambilan sampel penelitian ini. *Mann-Whitney U Test* adalah teknik analisis yang digunakan. Menurut temuan penelitian, tidak ada perbedaan yang cukup berarti antara risiko reksa dana dan risiko pasar untuk reksa dana syariah dalam hal *beta*, *return*, dan *Sharpe*. Sedangkan terdapat perbedaan yang bervariasi antara teknik *Treynor*, *Jensen Alpha*, *M² Measurement*, dan *Appraisal Ratio*.

Kata kunci: Kinerja; Reksadana; Syariah; Konvensional; Risk Adjusted Performance

ABSTRACT

This study compares the performance of Islamic and conventional mutual funds from 2017 to 2021 with the aim of analyzing the differences. This study makes use of secondary data from the Otoritas Jasa Keuangan (OJK) for 5 years that were downloaded from the OJK's official website (OJK). Purposive sampling is used in this study sampling method. The Mann-Whitney U Test is the analysis technique employed. According to the study's findings, there are no appreciable differences between mutual fund risk and market risk for Islamic mutual funds in terms of *beta*, *return*, and *Sharpe*. While there are variances between the *Treynor*, *Jensen Alpha*, *M² Measurement*, and *Appraisal Ratio* techniques.

Keywords: Performance; Mutual Fund; Sharia; Conventional; Risk Adjusted Performance

1. INTRODUCTION

The Covid-19 virus that has been attacking for the past 2 years has caused the unemployment rate in Indonesia to increase to 7.07 percent in 2020 and 6.49 percent in 2021 (Javier, 2021). Many productive-age workers have experienced termination of employment (PHK) due to the implementation of Lockdown or Pembatasan Sosial Berskala Besar (PSBB) and Pemberlakuan

Pembatasan Kegiatan Masyarakat (PPKM). However, the number of mutual fund investors actually increased by 215.77 percent, where as of December 2020 there were 3.17 million investors, and then increased to 6.84 million investors as of December 2021 (Malik, 2022). This is because, in addition to public awareness of the importance of investing for future financial well-being, investment in mutual funds is a collection of investment portfolios that have been well diversified by Investment Managers who manage investment funds so as to reduce risk and maximize investment returns (Sidik, 2021). Not only that, mutual funds are Asset Back Securities which in the Income Tax Law Article 4 paragraph 3 are Non-Taxable Objects, so investors are not taxed on the returns obtained from mutual funds.

In Indonesia, there are two groups of mutual funds, namely conventional mutual funds and Islamic mutual funds. The difference that distinguishes the two is that conventional mutual funds are more concerned with high returns and are only based on the rules that apply to the Otoritas Jasa Keuangan (OJK). While Islamic mutual funds pay attention to all aspects of Islamic principles in making investments ranging from contracts, objectives, management, transactions, portfolio contents, mechanisms and supervisory boards (Soemitra 2017); (Hartono, 2010; Agussalim et al., 2017).

Although both conventional and sharia mutual funds are managed by professional investment managers, the differences between the two mutual funds can be a consideration for investors to invest their funds. One of the things that must be done by investors before making a decision is to evaluate the performance of a mutual fund. Evaluation of the performance of a mutual fund can be done by calculating the level of risk and return and risk-adjusted performance consisting of the Sharpe, Treynor, Jensen Alpha methods (Tandelilin, 2017).

Research conducted by Agussalim et al. (2017); Mardadika et al. (2021) proved that with the application of the Sharpe, Treynor, and Jensen Alpha methods, no significant performance differences were found between Islamic and conventional stock mutual funds.

Meanwhile, research conducted by Herlambang (2020); Mufidah et al. (2020) shows that there is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds using the Sharpe, Treynor, and Jensen Alpha methods.

The purpose of this article is to compare the performance between Islamic mutual funds and conventional mutual funds in the form of stocks by measuring the level of risk, return, and methods in risk-adjusted performance, namely the Sharpe, Treynor, Jensen Alpha, M^2 Measurement, and Appraisal Ratio methods. This research was conducted in the period 2017-2021.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 MUTUAL FUNDS

According to Undang-Undang Pasar Modal Tahun 1995, article 1 paragraph (27) "Mutual funds are containers used to collect funds from the investor community to be invested in securities portfolios by Investment Management". It can be interpreted that mutual funds are containers used to collect funds from investors, which are then managed by the Investment Manager into a portfolio of investment securities in the form of stocks, bonds, and money instruments.

According to Hadi (2015), there are five types of mutual funds based on their investment portfolio, namely money market mutual funds, fixed income mutual funds, equity mutual funds, mixed mutual funds, and protected mutual funds: (1) Money market mutual funds are 100 percent invested in money market securities and are liquid and short-term. (2) Fixed-income mutual funds are mutual funds where the majority of the portfolio consists of income impact debt, a medium-term investment period. (3) Equity mutual funds are mutual funds that invest at least 8 percent of the managed portfolio in equity securities (shares), long-term investment periods because they follow market fluctuations. (4) Mixed mutual funds are mutual funds that invest in equity and debt securities whose ratio (allocation) does not include fixed-income mutual funds and equity mutual funds, the risk category and investment period depends on how many shares are in this mutual fund portfolio. Protected mutual funds are mutual funds that protect their investments from losses in the value of their investments.

2.2 SHARIA MUTUAL FUNDS

According to Soemitra (2017), the definition of Islamic mutual funds are:

Mutual funds whose management and investment policies refer to Islamic sharia. Sharia mutual funds will not invest their funds in financial instruments from companies whose management or products are contrary to Islamic law, such as alcoholic beverage factories, pig farming industries, financial services that involve usury systems in their operations, and businesses that contain immorality.

Islamic mutual funds have screening and cleansing in investing an investment instrument. The process of screening and cleansing Islamic stocks is carried out through three stages, namely: (1) business screening, which is to select companies whose business activities and management are not in accordance with the principles of Islamic law. (2) financial screening, which is the separation of assets and income from interest where total interest-based debt from total assets is no more than 45 percent and non-halal income should not exceed 10% of total income. (3) Sharia stocks included in the Sharia Securities List or a collection of securities that are not contrary to the principles of Islamic law (OJK n.d.).

2.3 MUTUAL FUND PERFORMANCE MEASUREMENT

Evaluation of mutual fund portfolio performance is an analytical activity designed to evaluate and determine the growth of mutual funds. This analysis is very important for investors to make investment decisions by looking at the performance of mutual funds in the previous period. The performance of the previous period does not guarantee good performance in the future period. However, with a positive record of mutual fund performance in the past, it will be an opportunity for good performance in the future (Handayani et al. 2019).

2.3.1 Rate of Return

According to Brigham; Houston (2019), returns can be in the form of expected returns or rates of return that have not yet occurred but are expected by investors to become a reality in the future. And in the form of realized return or the actual or actual rate of return that has occurred which is calculated based on historical data.

a. Mutual Fund Return

In measuring the return of mutual funds is by using the Net Asset Value Per Unit of Participation (NAV/UP). Formulated in the formula (Tandelilin 2017):

$$R_p = \frac{NAV_{perunit_1} - NAV_{perunit_0}}{NAV_{perunit_0}}$$

Where:

- R_p = mutual fund return
- $NAV_{perunit_1}$ = NAV/UP at the end of the period
- $NAV_{perunit_0}$ = NAV/UP at the beginning of the period

b. Market Return

Market Return is the level of profit obtained from the performance of both Islamic and conventional capital markets. This study uses the Composite Stock Price Index (JCI) as a reference for calculating the level of conventional capital market returns and the Jakarta Islamic Index (JII) for Islamic capital market returns.

$$Rm1 = \frac{IHSG_1 - IHSG_0}{IHSG_0}$$

Where:

- $Rm1$ = Conventional market return
- $IHSG_1$ = Composite market price index at the end of the period
- $IHSG_0$ = Composite market price index at the beginning of the period

$$Rm2 = \frac{JII_1 - JII_0}{JII_0}$$

Where:

- $Rm2$ = Islamic market return
- JII_1 = Jakarta Islamic Index at the end of the period

III_0 = Jakarta Islamic Index at the beginning of the period
Composite market price index at the beginning of the period

c. Risk Free Rate of Investment

Risk free assets or in other terms, risk free profits are profits earned from investment instruments with very little risk. This rate is measured by the provisions made by Bank Indonesia, namely the BI rate or monetary policy interest rate.

$$\overline{R_f} = \frac{R_{f_1} + R_{f_2} + R_{f_i}}{n}$$

Where:

$\overline{R_f}$ = average risk-free investment return during the observation period
 R_{f_i} = BI rate in period i
 n = number of observation periods

2.3.2 Risk

Webster's Dictionary in Brigham; Houston (2019, p. 340) defines risk as "a hindrance; annoyance; exposure to loss or accident". This means that risk is a bad or unfavourable chance of an event. The most widely used method is standard deviation, which is an absolute measurement for the deviation of the values that have occurred from the expected values.

$$\sigma = \sqrt{\frac{\sum_{i=1}^n [R_p - E(R_p)]^2}{n - 1}}$$

Where:

σ = standard deviation
 R_p = mutual fund return
 $E(R_p)$ = average return of mutual funds
 n = sum of historical data observations

Risk does not only come from the mutual fund portfolio, but there is systematic risk or market risk which cannot be diversified because this risk is related to changes that occur in the market as a whole. This calculation is measured by the calculation of beta (β) which is formulated as follows (Bodie et al. 2014):

$$\beta = \frac{\text{Cov}(R_i, R_M)}{\sigma^2_M}$$

Where:

β = beta or systematic risk of the observation period
 $\text{Cov}(R_i, R_M)$ = return covariance of portfolio i and market m

σ^2_M = variance of market return m

2.3.3 Risk-Adjusted Performance

According to Tandililin (2017) in evaluating the performance measurement of mutual fund portfolios can use measurements based on risk adjusted performance which in calculating the return generated by the portfolio, also takes into account other factors such as the level of portfolio risk.

a. Sharpe Method

The Sharpe method compares an investment's return to its risk. This index is used to measure investment performance by adjusting for risk. The higher the ratio, the greater the investment return relative to the amount of risk taken, and thus, the better the investment.

$$S_i = \frac{\overline{R_p} - \overline{R_f}}{\sigma_i}$$

Where:

- S_i = average monthly mutual fund return during the observation period
- $\overline{R_p}$ = average return of mutual funds for the observation period (BI rate)
- $\overline{R_f}$ = average risk-free investment return rate for the observation period
- σ_i = standard deviation of mutual fund i's return during the observation period

b. Treynor Method

The Treynor method is a risk/return measure that allows investors to adjust portfolio returns for systematic risk. A higher return means the portfolio is a more suitable investment. This method is similar to Sharpe, the difference being that Sharpe uses the standard deviation of the portfolio to adjust the portfolio return.

$$T_i = \frac{\overline{R_p} - \overline{R_f}}{\beta_p}$$

Where:

- T_i = Treynor ratio
- $\overline{R_p}$ = average mutual fund return during the observation period (BI rate)
- $\overline{R_f}$ = average risk-free investment return rate over the period observation
- β_p = beta of the investment portfolio during the observation period

c. Jensen Alpha Method

The Jensen Alpha method is the excess return above or below the security market line. If it is positive, it means that the portfolio provides a return greater than its expected return so it is good because the portfolio has a relatively high level of return for its systematic level.

$$J\alpha = \overline{R_p} - [\overline{R_f} + \beta_p(\overline{R_m} - \overline{R_f})]$$

Where:

$J\alpha$	= Jensen Alpha
$\overline{R_p}$	= average return of mutual fund portfolio
$\overline{R_m}$	= average market return
$\overline{R_f}$	= average return free rate (BI rate)
β_p	= investment portfolio beta

d. M² Measurement Method

According to Hartono (2017, p. 747) M-square Measurement or M² is an extension of the Sharpe method. If it is positive, it means that the product can outperform market performance if the risk is comparable to market risk.

$$M^2 \text{ Measurement} = \left(\frac{\overline{R_p} - \overline{R_f}}{\sigma_p} \times \sigma_m + \overline{R_f} \right) - \overline{R_m}$$

Where:

R_p	= mutual fund return obtained from the equation
R_m	= market return
R_f	= return free rate (BI rate)
σ_m	= market standard deviation
σ_p	= standard deviation, reflecting the overall risk of the company

e. Appraisal Ratio Method

Bodie et al. (2008; Mawikere 2022) explains that the Appraisal Ratio is an extension of the Jensen Alpha method which measures the performance of mutual funds against the risk adjusted return on financial security in the form of assets and portfolios. The higher the Appraisal Ratio value, the better the performance of the mutual fund being measured.

$$AR = \frac{\alpha_p}{\sigma(\epsilon_p)}$$

Where:

AR	= Appraisal Ratio
α_p	= Jensen Alpha
$\sigma(\epsilon_p)$	= nonsystematic risk (tracking error)

2.4 HYPOTHESIS DEVELOPMENT

Research conducted by Agussalim et al. (2017) entitled "Mutual Funds Performance: Conventional and Sharia Product" concluded that mutual fund performance based on risk and return there is a difference between the two.

While with the Sharpe, Treynor, and Jensen Alpha methods there is no significant difference.

Huda et al. (2017) conducted research in the 2012-2015 period with the Sharpe, Treynor, Jensen Alpha, M^2 Measurement, T^2 Measurement, and Appraisal Ratio methods, finding no significant difference in mutual fund performance between Islamic stock mutual funds and conventional stock mutual funds.

Lianti et al. (2017) with his research on mutual fund performance with Sharpe and Treynor techniques stated that there was no significant difference in mutual fund performance with the performance value of conventional stock mutual funds slightly better than Islamic stock mutual funds.

Azmi & Fianto (2019) who conducted research for the 2008-2018 period concluded that there was no difference except in the Jensen Alpha method where the performance of Islamic mutual funds was not better than conventional mutual funds. While the Sharpe, Treynor, Modigliani Measurement, Appraisal Ratio, and Adjusted Sharpe Ratio methods show the performance value of Islamic mutual funds is superior to conventional mutual funds.

Research results Handayani et al. (2019) with his research comparing the performance of conventional mutual funds with Islamic mutual funds, concluded that no difference was found in the Sharpe and Treynor methods. While in the Jensen Alpha method there is a difference.

Mahmood et al. (2019) conducted research on the performance of Islamic and conventional stock mutual funds during the economic crisis in Pakistan using the Sharpe, Treynor, Jensen Alpha, M^2 Measurement, Appraisal Ratio methods, concluding that the performance of Islamic stock mutual funds does not have a significant difference with conventional stock mutual funds.

Mufidah et al. (2020) conducted research in the 2017-2019 period with the Sharpe, Treynor, and Jensen Alpha calculation methods, concluding that there is a significant difference in the performance of Islamic stock mutual funds compared to conventional stock mutual funds.

Indriani & Budyastuti (2021) concluded that there was no significant performance difference in the Sharpe method and AUM Growth. The Treynor and Jensen Alpha methods have differences between them.

Research from Mardadika et al. (2021) found no prominent performance differences between Islamic and conventional stock mutual funds in the calculation of the Sharpe, Treynor, and Jensen Alpha methods.

Research conducted by Sari & Riwayati (2021) found differences between Islamic stock mutual funds and conventional stock mutual funds based on the Sharpe method. However, there is no notable difference between the two in the Treynor and Jensen Alpha methods.

Utami & Puspitasari (2021) concluded in their research entitled "A Geographical Comparative Study on Conventional Versus Sharia Mutual Fund Performance" that based on Sharpe, Treynor, and Jensen Alpha there is a significant difference, where conventional stock mutual funds are superior to Islamic stock mutual funds.

From the results of previous research, hypotheses can be proposed, namely:

- H1 : There is no significant difference between the performance of Islamic equity mutual funds and conventional equity mutual funds based on risk and return.
- H2 : There is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the Sharpe method.
- H3 : There is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the Treynor method.
- H4 : There is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the Jensen Alpha method.
- H5 : There is no significant difference between the performance of Islamic equity mutual funds and conventional equity mutual funds based on risk adjusted performance with the M² Measurement method.
- H6 : There is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the Appraisal Ratio method.

3. RESEARCH METHODS

This study analyses the performance of conventional and sharia equity mutual funds in Indonesia with measurements based on risk, return, and risk adjusted performance with 5 methods namely Sharpe, Treynor, Jensen Alpha, M² Measurement, and Appraisal Ratio. This type of research uses a comparative method with a quantitative approach. The sample population taken in this study were all mutual funds in the form of Collective Investment Contracts (KIK) and registered with the Financial Services Authority (OJK) in 2017-2021.

The sample was selected using purposive sampling method with the following criteria: (a) Type of stock mutual funds. (b) Stock mutual funds are registered, remain active, and are listed on the OJK in 2017-2021. (c) Have Net Asset Value (NAV) from December 2016 - December 2021. (d) Islamic and conventional mutual funds are under the same Investment Manager. (e) The number of samples with NAV and Participation Units (UP) is not 00.00.

Based on the results of these criteria, a sample of both sharia and conventional stock mutual funds that meet the criteria is obtained, namely 26 sharia stock mutual funds and 26 conventional stock mutual funds from 26 Investment Managers (Table 1).

The type of data used in this study is secondary data, namely the NAV from the OJK website (www.ojk.go.id), the standard interest set at Bank

Indonesia (BI Rate) from the Central Statistics Agency website (www.bps.go.id), the Composite Price Index (JCI) and the Jakarta Islamic Index (JII) from the Google Finance website (www.google.com/finance). Data collection techniques using documentation techniques from various sources. This research analyses the performance ratio of stock mutual funds with Microsoft Excel 2019 and Statistical Product and Service Solutions (SPSS) Version 26 Mann Whitney U Test method.

Table 1. Sharia and Conventional Equity Fund Samples

Code	Name of Islamic Mutual Fund	Manajer Investasi	Code	Name of Conventional Mutual Fund
RDSK01	Avrist Equity Cross Sectoral	Avrist Asset Management	RDSS01	Avrist Equity Amar Syariah
RDSK02	Bahana Dana Prima	Bahana TCW Investment Management	RDSS02	Bahana Icon Syariah
RDSK03	Batavia Dana Saham Optimal	Batavia Prosperindo Aset Manajemen	RDSS03	Batavia Dana Saham Syariah
RDSK04	BNIAM Dana Saham Inspiring Equity Fund	BNI Asset Management	RDSS04	BNIAM Dana Saham Syariah Musahamah
RDSK05	BNP Paribas Maxi Saham	BNP Paribas Asset Management	RDSS05	BNP Paribas Pesona Syariah
RDSK06	Cipta Prima	Ciptadana Asset Management	RDSS06	Cipta Syariah Equity
RDSK07	Corfina Grow 2 Prosper Rotasi Strategis	Corfina Capital	RDSS07	Corfina Equity Syariah
RDSK08	Danareksa Mawar Fokus 10	Danareksa Investment	RDSS08	Danareksa Syariah Saham
RDSK09	HPAM Investa Ekuitas Strategis	Henan Putihrai Asset Management	RDSS09	HPAM Syariah Ekuitas
RDSK10	Lautandhana Growth Fund	Lautandhana Investment Management	RDSS10	Lautandhana Saham Syariah
RDSK11	Mandiri Saham Atraktif	Mandiri Manajemen Investasi	RDSS11	Mandiri Investa Atraktif Syariah
RDSK12	Maybank Dana Ekuitas	Maybank Asset Management	RDSS12	Maybank Dana Ekuitas Syariah
RDSK13	MNC Dana Ekuitas	MNC Asset Management	RDSS13	MNC Dana Syariah Ekuitas

Code	Name of Islamic Mutual Fund	Manajer Investasi	Code	Name of Conventional Mutual Fund
RDSK14	Pacific Equity Fund	Pacific Capital Investment	RDSS14	Pacific Saham Syariah
RDSK15	Pan Arcadia Dana Saham Bertumbuh	Pan Arcadia Capital	RDSS15	Pan Arcadia Dana Saham Syariah
RDSK16	Panin Dana Maksima	Panin Asset Management	RDSS16	Panin Dana Syariah Saham
RDSK17	PNM Saham Agresif	PNM Investment Management	RDSS17	PNM Ekuitas Syariah
RDSK18	Pool Advista Kapital Optimal	Pool Advista Aset Manajemen	RDSS18	Pool Advista Kapital Syariah
RDSK19	Pratama Dana Atraktif Saham	Pratama Capital Assets Management	RDSS19	Pratama Syariah
RDSK20	Principal Smart Equity Fund	Principal Asset Management	RDSS20	Principal Islamic Equity Growth Syariah
RDSK21	Prospera Dana Berkembang	Prospera Asset Management	RDSS21	Prospera Syariah Saham
RDSK22	Sam Indonesian Equity Fund	Samuel Aset Manajemen	RDSS22	SAM Sharia Equity Fund
RDSK23	Simas Danamas Saham	Sinarماس Asset Management	RDSS23	Simas Syariah Unggulan
RDSK24	Sucorinvest Saham Dinamis	Sucorinvest Asset Management	RDSS24	Sucorinvest Sharia Equity Fund
RDSK25	Treasure Fund Super Maxxi	Treasure Fund Investama	RDSS25	Treasure Saham Berkah Syariah
RDSK26	Trimegah Bhakti Bangsa	Trimegah Asset Management	RDSS26	TRIM Syariah Saham

Source: ojk.go.id, data processed, 2022

4. RESULTS AND DISCUSSION

4.1 RESULTS OF HYPOTHESIS TESTING 1

The following are the results of hypothesis testing 1 in Table 2:

Table 2. Hypothesis Testing Results
Performance of Islamic and Conventional Equity Funds Based on Mutual Fund Risk, Market Risk, and Return

No.	Performance	Average of	Average of	Hypothesis Test
-----	-------------	------------	------------	-----------------

	Measurement	Conventional Equity Funds	Sharia Equity Mutual Funds	Sig (2 tailed)	Null hypothesis
1	Risk	125.86	135.14	.320	retrieved
2	Beta	121.84	139.16	.063	retrieved
3	Return	137.65	123.35	.125	rejected

Source: data processed, 2022

Based on the Table above, shows that the performance of stock mutual funds in terms of risk (mutual fund risk and market risk) of Islamic mutual funds is on average greater than conventional mutual funds. But in terms of return, conventional stock mutual funds are superior to Islamic stock mutual funds. The results of the t-test based on mutual fund risk, market risk (beta), and return show a significance value >0.05 . This indicates that the null hypothesis (H1) is accepted, meaning that there is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk and return.

The results of research on the comparison of stock mutual fund performance based on risk and return can be interpreted that conventional stock mutual funds have both mutual fund risk and low market risk with greater returns than Islamic stock mutual funds. This is due to different benchmark differences, especially during the Covid-19 period in 2020 and 2021, so it is possible that the returns obtained by Islamic stock mutual funds are lower. Nevertheless, the return generated from Islamic stock mutual funds is not too far from the return of conventional stock mutual funds.

This research is supported by research conducted by Mahmood et al. (2019) which states that the risks and returns that occur during the economic crisis in Pakistan do not make the value of risk and return of the two mutual funds far apart.

The results of this study are also in line with research Agussalim et al. (2017) stated that there was no significant performance difference between Islamic stock mutual funds and stock mutual funds based on risk and return in Indonesia in the period 2007-2014.

4.2 RESULTS OF HYPOTHESIS TESTING 2

The following are the results of hypothesis testing 2 in Table 3:

Table 3. Hypothesis Testing Results
Performance of Islamic and Conventional Equity Funds
Based on Risk Adjusted Performance Sharpe Method

Performance Measurement	Average of Conventional Equity Funds	Average Sharia Equity Mutual Fund	Hypothesis Test	
			Sig (2 tailed)	Null hypothesis
Sharpe	130.11	130.89	.934	retrieved

Source: data processed, 2022

Based on the Table above, it shows that the performance of stock mutual funds based on Risk Adjusted Performance in the Sharpe method in Islamic mutual funds is greater than conventional mutual funds. This means that in the Sharpe method, Islamic stock mutual funds are superior in compensating for the total risk in mutual funds compared to conventional stock mutual funds. The difference test results based on the Sharpe method show a significance value> 0.05. This shows that the null hypothesis (H2) is accepted, which means that there is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance using the Sharpe method.

The results of this study are supported by research Lianti et al. (2017) which states that there is no significant difference in performance between Islamic stock mutual funds and conventional stock mutual funds with the Sharpe calculation method. This research is also in line with research Handayani et al. (2019) which states that there is no significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds measured by the Sharpe method.

The results of this study are not in line with Utami; Puspitasari (2021)’s research which states that there are significant performance differences between Islamic and conventional stock mutual funds measured by the Sharpe method. This research can also break the opinion of Herlambang (2020) which states that there is a significant performance difference between Islamic stock mutual funds and conventional stock mutual funds measured by the Sharpe method.

4.3 RESULTS OF HYPOTHESIS TESTING 3

The results of hypothesis testing 3 are outlined in Table 4:

Table 4. Hypothesis Testing Results
Performance of Islamic and Conventional Equity Funds
Based on Risk Adjusted Performance Treynor Method

Performance Measurement	Average of Conventional Equity Funds	Average Sharia Equity Mutual Fund	Hypothesis Test	
			Sig (2 tailed)	Null hypothesis
Treynor	114.26	146.74	<.001	rejected

Source: data processed, 2022

Based on the Table above, it shows that the performance of stock mutual funds based on Risk Adjusted Performance in the Treynor calculation method in Islamic mutual funds is greater than conventional mutual funds. This means that in the Treynor method, Islamic stock mutual funds are superior in compensating market risk compared to conventional stock mutual funds. The difference test results based on the Treynor method show a significance value of <0.05. This shows the null hypothesis (H3) is rejected, which means there is a significant difference between the performance of Islamic stock mutual

funds and conventional stock mutual funds based on risk adjusted performance with the Treynor method.

The results of this study agree with the research of Mufidah, et al. (2020) which states that using the Treynor calculation method, there is a significant difference in performance between Islamic and conventional stock mutual funds. This research is also in line with research Indriani & Budyastuti (2021) which states that there is a significant difference in performance between Islamic and conventional stock mutual funds.

The results of this study are not in line with the research of Mardadhika, et al. (2021) which states that there is no significant performance difference between the performance of Islamic stock mutual funds and conventional stock mutual funds. The results of this study are also not the same as research Sari & Riwayati (2021) which states that there is a significant performance difference between the performance of Islamic and conventional stock mutual funds.

4.4 RESULTS OF HYPOTHESIS TESTING 4

The following are the results of hypothesis testing 4 in Table 5:

Table 5. Hypothesis Testing Results
Performance of Islamic and Conventional Equity Funds
Based on Risk Adjusted Performance Jensen Alpha Method

Performance Measurement	Average of Conventional Equity Funds	Average Sharia Equity Mutual Fund	Hypothesis Test	
			Sig (2 tailed)	Null hypothesis
Jensen Alpha	114.87	146.13	<.001	rejected

Source: data processed, 2022

Based on the Table above, it shows that the performance of stock mutual funds based on Risk Adjusted Performance in the Jensen Alpha calculation method in Islamic mutual funds is superior to conventional mutual funds. That is, in the Jensen Alpha method, Islamic stock mutual funds can provide greater actual returns than expected returns than conventional stock mutual funds. The difference test results based on the Jensen Alpha calculation method show a significance value of <0.05. This shows that the null hypothesis (H4) is rejected, which means that there is a significant difference between the performance of Islamic and conventional stock mutual funds based on risk adjusted performance with the Jensen Alpha method.

This research is in line with the research of Handayani et al. (2019) and Herlambang's research (2020) which used the Jensen Alpha method and found significant performance differences between Islamic and conventional stock mutual funds. The results of this study are not in line with the research of Mardadhika et al. (2021) and research Sari & Riwayati (2021) which states that there is no significant performance difference between the performance of Islamic and conventional equity mutual funds.

4.5 RESULTS OF HYPOTHESIS TESTING 5

The following are the results of hypothesis testing 5 in Table 6:

Table 6. Hypothesis Testing Results
Performance of Islamic and Conventional Equity Funds
Based on Risk Adjusted Performance M2 Measurement Method

Performance Measurement	Average of Conventional Equity Funds	Average Sharia Equity Mutual Fund	Hypothesis Test	
			Sig (2 tailed)	Null hypothesis
M ² Measurement	142.85	118.35	<.001	rejected

Source: data processed, 2022

Based on the Table above, it shows that the performance of stock mutual funds based on Risk Adjusted Performance in the M² Measurement method in conventional mutual funds is greater than Islamic mutual funds. That is, in the M² Measurement method, the performance of conventional stock mutual funds is superior in exceeding market performance if the risk is equated with market risk compared to Islamic stock mutual funds. The difference test results based on the M² Measurement method show a significance value of <0.05. This shows the null hypothesis (H5) is rejected, which means there is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the M² Measurement method.

The results of this study are not in line with the research of Azmi & Fianto (2019) which states that there is no significant performance difference between Islamic and conventional stock mutual funds based on the Modligani Measure (M² Measurement) method. The results of this study also disagree with Huda et al. (2017) which states that there is no significant performance difference between Islamic and conventional stock mutual funds using the M² Measurement method.

4.6 RESULTS OF HYPOTHESIS TESTING 6

The following are the results of hypothesis testing 6 in Table 7:

Table 7. Hypothesis Test Results
Performance of Islamic and Conventional Equity Funds
Based on Risk Adjusted Performance Appraisal Ratio Method

Performance Measurement	Average of Conventional Equity Funds	Average Sharia Equity Mutual Fund	Hypothesis Test	
			Sig (2 tailed)	Null hypothesis
Appraisal Ratio	149.78	111.22	<.001	rejected

Source: data processed, 2022

Based on the Table above, it shows that the performance of stock mutual funds based on Risk Adjusted Performance in the Appraisal Ratio method in conventional mutual funds is greater than Islamic mutual funds. This means that in the Appraisal Ratio method the performance of conventional stock mutual fund Investment Managers in providing information is better than sharia stock mutual funds. The difference test results based on the Appraisal Ratio method show a significance value of <0.05 . This shows that the null hypothesis (H_0) is rejected, which means that there is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds based on risk adjusted performance with the Appraisal Ratio method.

This research agrees with the research of Azmi & Fianto (2019) which states that there is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds measured by the Appraisal Ratio method.

The results of this study disagree with the research of Huda et al. (2017) which states that there is no significant performance difference between Islamic and conventional stock mutual funds. The results of this study are also not the same as the research of Mahmood, et al. (2019) which states that there is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds with the performance of Islamic stock mutual funds based on the Appraisal Ratio is superior.

5. CONCLUSION

There is a significant difference between the performance of Islamic stock mutual funds and conventional stock mutual funds where Islamic stock mutual funds are superior to conventional stock mutual funds based on risk adjusted performance in the calculation method of Treynor, Jensen Alpha, M^2 Measurement, and Appraisal Ratio. While the performance of stock mutual funds based on risk and return, as well as risk adjusted performance on the Sharpe calculation method shows that there is no significant difference between the two stock mutual funds.

The performance of stock mutual funds based on risk and return of conventional stock mutual funds has better performance because the risk of both mutual funds and market risk is low with a greater return than Islamic stock mutual funds. However, the return generated from Islamic stock mutual funds is not too far from the return of conventional stock mutual funds.

The performance of stock mutual funds based on risk adjusted performance in the M^2 Measurement and Appraisal Ratio methods of conventional stock mutual funds shows better performance than Islamic mutual funds. However, in the Sharpe, Treynor, and Jensen Alpha methods, Islamic stock mutual funds are superior to conventional stock mutual funds. In other words, Islamic stock mutual funds can still compete with conventional

stock mutual funds in terms of performance calculations based on risk adjusted performance.

This research can be a reference or reference for investors in the process of making investment decisions in stock mutual funds. Investors, especially those who are Muslim, are advised to invest in Islamic stock mutual funds. Not only in terms of return and risk that are not much different from conventional stock mutual funds, Islamic stock mutual funds are also better able to compensate for total risk and market risk and can provide actual returns greater than expected returns. In addition, from a spiritual point of view, Islamic stock mutual funds are superior because in terms of contracts, management, and so on are in accordance with the principles of Islamic law.

Future research is expected to examine not only equity mutual funds, but also other mutual funds such as money market mutual funds, fixed income mutual funds, mixed mutual funds, and protected mutual funds. Not only that, it is recommended that future research also look at the sector focus on mutual fund portfolios such as the technology sector, mining, BUMN, and so on as a comparison. And finally, it is advisable for future research to pay attention to the similarity of forming components (such as stocks and bonds) in mutual fund portfolios in order to be more careful in conducting different tests.

6. REFERENCES

- Agussalim, M, Nandan Limakrisna, and Hapzi Ali. 2017. "Mutual Funds Performance: Conventional and Sharia Product." *International Journal of Economics and Financial Issues* 7 (4): 150–56. <http://www.econjournals.com>.
- Azmi, Zulfiyah, and Bayu Arie Fianto. 2019. "Pengukuran Kinerja Reksadana Pada Reksadana Syariah Dan Reksadana Konvensional Di Indonesia Periode 2008-2018." *Jurnal Ekonomi Syariah Teori Dan Terapan* 6 (9): 1859–60. <https://doi.org/https://doi.org/10.20473/vol6iss20199pp1851-1861>.
- Bodie, Zvi, Alex Kane, and Alan J. Marcus. 2014. *Manajemen Portofolio Dan Investasi. I*. 9th ed. Jakarta: Salemba Empat.
- Brigham, Eugene F., and Joel F. Houston. 2019. *Dasar-Dasar Manajemen Keuangan*. 14th ed. Jakarta: Salemba Empat.
- Hadi, Nor. 2015. *Pasar Modal*. 2nd ed. Yogyakarta: Graha Ilmu.
- Handayani, Trie Utari, Perdana Wahyu Santosa, and Any Setianingrum. 2019. "Perbandingan Kinerja Reksadana Konvensional Dengan Syariah." *Journal of Economics and Business Aseanomics* 4 (2): 77–92. <http://academicjournal.yarsi.ac.id/jeba>.
- Hartono, Jogyianto. 2017. *Teori Portofolio Dan Analisis Investasi*. 11th ed. Yogyakarta: BPFE.

- Herlambang, Apriadi Permata. 2020. "The Performace Comparation in Indonesia: Conventional Mutual Funds vs Sharia Mutual Funds." *Journal of Business Management Review* 1 (5): 296–312. <https://doi.org/10.47153/jbmr15.642020>.
- Huda, Nurul, Nazwirman Nazwirman, and Khamim Hudori. 2017. "Analisis Perbandingan Kinerja Reksadana Saham Syariah Dan Konvensional Periode 2012-2015." *IQTISHADIA* 10 (2). <https://doi.org/10.21043/iqtishadia.v10i2.2242>.
- Indriani, Riri, and Triyani Budyastuti. 2021. "Analisis Kinerja Reksadana Konvensional Dan Reksadana Syariah Untuk Keputusan Investasi Investor." *Jurnal Akuntansi, Keuangan, Pajak Dan Informasi (JAKPI)* 1 (1). <https://journal.moestopo.ac.id/index.php/jakpi/article/view/1345>.
- Javier, Faisal. 2021. "BPS: Tingkat Pengangguran Terbuka Pada Agustus 2021 Turun 0,58 Persen Dibanding Agustus 2020." *Tempo.Co*. November 15, 2021. <https://data.tempo.co/data/1261/bps-tingkat-pengangguran-terbuka-pada-agustus-2021-turun-058-persen-dibanding-agustus-2020>.
- Lianti, Aryati, and Nurul Ramaya. 2017. "Analisis Perbandingan Kinerja Reksadana Saham Syariah Dengan Reksadana Saham Konvensional Di Indonesia" 18 (2). <http://e-jurnal.pnl.ac.id/index.php/ekonis/article/view/402>.
- Mahmood, Khalid, Waheed Akhter, and Khalid Shahzad. 2019. "Return and Risk Based Performance of Conventional and Islamic Equity Funds: A Comparative Study From Pakistan." *Pakistan Business Review* 21 (1): 87–97. pbr.iobm.edu.pk.
- Malik, Abdul. 2022. "Jumlah Investor Reksadana Di 2021 Tembus 6,84 Juta, SBN 611 Ribu." *Bareksa.Com*. January 11, 2022. <https://www.bareksa.com/berita/reksa-dana/2022-01-11/jumlah-investor-reksadana-di-2021-tembus-684-juta-sbn-611-ribu>.
- Mardadika, Yusuf Putra, Zainal Abdul Haris, and Bakhrudin. 2021. "Analisis Perbandingan Kinerja Reksadana Konvensional Dengan Reksadana Syariah Berdasarkan Risk and Return." *Seminar Nasional Gabungan Bidang Sosial-Polinema*, 121–22. <https://prosiding.polinema.ac.id/sngbs/index.php/sngbs/article/view/303/254>.
- Mawikere, Jessica Claudia. 2022. "Performance Analysis of Money Market Mutual Funds, Fixed Income, Mixed Mutual Funds, and Stock Mutual Funds in Indonesia During The 2015-2020 Period." *Business and Accounting Research (IJEBA) Peer Reviewed-International Journal* 5 (4). <https://jurnal.stie-aas.ac.id/index.php/IJEBA>.

- Mufidah, Evi Nailul, Dhuwik Iffuk, and Kharis Fadlullah Hana. 2020. "Perbandingan Kinerja Reksadana Saham Syariah Dan Konvensional (Pada 10 Reksadana Di BEI Tahun 2017-2019)." *Journal of Islamic Finance and Accounting* 3 (2): 111–20. <https://ejournal.uinsaid.ac.id/index.php/jifa/article/view/2507>.
- Otoritas Jasa Keuangan. n.d. "Pasar Modal Syariah." Ojk.Go.Id. Accessed January 23, 2022. <https://www.ojk.go.id/id/kanal/syariah/pages/pasar-modal-syariah.aspx>.
- Republik Indonesia. 1995. "Undang-Undang Nomor 1 Ayat 27 Tahun 1995 Tentang Pasar Modal."
- Sari, Nurul Isra, and Hedwigis Esti Riwayati. 2021. "Analisis Perbedaan Kinerja Reksadana Saham Konvensional Dengan Reksadana Saham Syariah." *Prosiding Seminar Nasional Perbanas* 1 (1). <https://journal.perbanas.id/index.php/psn/article/view/398>.
- Sidik, Syahrizal. 2021. "Berkah Pandemi, Masyarakat Jadi Melek Buat Investasi." Cnbcindonesia.Com. November 23, 2021. <https://www.cnbcindonesia.com/market/20211123145137-17-293752/berkah-pandemi-masyarakat-jadi-melek-buat-investasi>.
- Soemitra, Andi. 2017. *Bank & Lembaga Keuangan Syariah*. 2nd ed. Jakarta: Prenada Media.
- Tandelilin, Eduardus. 2017. *Pasar Modal: Manajemen Portofolio & Investasi*. Yogyakarta: Kanisius.
- Utami, Eristy M, and Devy M Puspitasari. 2021. "A Geographical Comparitiive Study On Conventional Versus Sharia Mutual Fund Performance." *Review of International Geographical Education (RIGEO)* 11 (1): 436–42. <https://doi.org/10.48047/rigeo.11.1.28>.

