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PERFORMANCE ANALYSIS WITH SHARPE INDEX APPROACH IN FIXED INCOME ISLAMIC MUTUAL FUNDS

Yulis Nurul Aini[1*], Baroroh Lestari[2], Yekie Senja Oktora[3]
[1,2,3]Marketing Management Study Program, Department of Commercial Administration, Politeknik Negeri Malang
E-mail: [1)] yulisnurulaini@polinema.ac.id

Abstract
The purpose of this study is to gain an understanding of how the performance of fixed income sharia mutual funds has fared in the Indonesian Capital Market. The information used in the research came from financial reports and publications that were made available on the Indonesia Stock Exchange. These reports covered the time period 2018-2020. For the purpose of providing an explanation of the performance of fixed income Sharia mutual funds, the financial statement is studied using Index Sharpe. According to the findings of this research, the performance of fixed income sharia mutual funds has a negative performance during the period of 2018-2020.

Keywords: *Index Sharpe, Performance, Sharia Mutual Funds*

1. INTRODUCTION

Investment is an activity of placing funds with the aim of obtaining profits in the future. The profits obtained by investors are capital gains and cash income (Aminah, 2021). Capital gain is in the form of the than when selling the Mutual Fund. Profits can be obtained by means of investors who must be able to choose the right means. One of the investment facilities favored by investors is sharia fixed-income mutual funds. Sharia Mutual Funds are institutions that manage public funds by professional portfolio managers and then invest in securities in accordance with sharia principles. This Fixed Income Sharia Mutual Fund offers stable income, safe securities, and low risk.

The potential for financial gain and an increased rate of return are two additional benefits of investing for investors. When purchasing a mutual fund, it is possible to generate capital gains if the purchase price is lower than the selling price of the mutual fund. A mutual fund is a type of investment company that collects public funds and invests them in a securities portfolio managed by investment managers (Bodi, 2014). The rate of return can be calculated by subtracting the rate of interest on the invested capital from one another. Fixed-income Sharia mutual funds are an example of a type of investment vehicle that continues to hold a lot of appeal for investors. Fixed-Income Sharia Mutual Funds offer benefits to investors in the form ofconsistent income, secure securities due to minimal risk, and expert management based on shariaprinciples to give investors a sense of security.

Sharia Mutual Funds offer benefits as well as risks that investors are willing to undertake. The disadvantages include, first, a drop in the exchange rate, i.e., the possibility of a drop in the value of a country's currency, which might lower the value of an investment. Second, a capital loss manifested as a drop in the selling price rather than

the purchasing price. Therefore, in the investment market, the rate of return or the share of uncertain returns due to performance rises andfalls.

When selecting investment vehicles, investors must consider both the level of risk and reward when making judgments. Risk is the unpredictability of the rate of return investors will earn. The rate of return is extremely essential since it demonstrates the company's performance and future risk, and sets the predicted rate of return. Risk and reward are linearly related. The bigger the risk, the greater the rate of return investors earn, according to this linear connection. Consequently, each investor's investment decision must be based on risk and return rate.

In light of the information presented above, the question at hand concerns the manner in which Islamic mutual funds are evaluated in terms of the risks they incur and the rates of return they generate. Because we are just focusing on the data and the discussion, this research is quite limited.The following types of data are going to be investigated: The performance information that was analyzed was provided in the form of monthly performance and could be found in the publications of the Indonesia Stock Exchange. The main objective of this study is to gain an understanding of the relationship between the risk taken and the rate of return achieved by Sharia Mutual Funds.

2. LITERATURE REVIEW

2.1. Previous Research

Previous research relevant to this study was undertaken by (Yudawanto, 2017), which showed that there is no fixed income mutual fund performance value that consistently delivers positive performance, with the exception of the Danamas mutual fund, which has positive performance.

Meanwhile, (Pratiwi, 2017) discover that the Sharpe index shows no difference in performance between Islamic mutual funds and conventional mutual funds, the Treynor index shows no difference in performance between Islamic mutual funds and conventional mutual funds, and the Jensen index shows no difference in performance between Islamic mutual funds and conventional mutual funds.

Furthermore, (Anggara, 2017) did research on Stock Mutual Fund Performance Using the Sharpe, Treynor, and Jensen Methods which came to the conclusions that there were stock Mutual Funds that consistently performed well during the study period (2012-2014). Likewise, (Sumarmo, 2019) conducted research with the goal of comparing the performance of JII and LQ45 stocks and reveals that JII stocks outperformed LQ45 in 2015, according to sharpe, treynor, and alpha-jensen index tests.

2.2. Mutual Fund Investment

A mutual fund is a type of investment company that collects public funds and invests them in a securities portfolio managed by investment managers. Mutual funds can also be defined as a type of financial intermediary that accepts capital contributions from individual investors and invests those contributions in a diverse portfolio of stocks, bonds, and other types of assets (Body, 2014).

According to (Gitman, 2017), the primary reasons why investors prefer mutual funds as their investment fund are:

1) Asset holding

   In the sense that mutual funds may preserve the value of an investor's wealth, mutual funds are favored by investors for use as deposits. Mutual funds are among the products that offer capital protection and a highly competitive rate of return.

2) Financial Accumulation

   Mutual funds are typically chosen by investors for long-term capital investments. Investing in Mutual Funds might be motivated by a variety of objectives, but investors still consider capital stability and the dangers they will incur. Consequently, the accumulation of vast sums of money is possible.

3) Trading on the Short-Term and Speculatively

   Mutual funds are enticing to investors due to their use in speculative and short-term trading. Mutual Funds can be subject to aggressive trading, which might alter the mutual fund trading climate. The costs incurred by investors engaging in aggressive trading on mutual funds are avoidable, as are the costs incurred as a result.

2.3. Sharia Mutual Funds

2.3.1. Sharia Mutual Fund Regulations

As specified in Financial Service Authority Regulation (OJK, 2015), concerning the Issuance and Requirements of Sharia Mutual Funds article 1 as follows:

1) Sharia Mutual Funds are Mutual Funds as referred to in the Capital Market Law and its implementing regulations whose management does not conflict with Sharia Principles in the Capital Market.
2) Fixed Income Sharia Securities are Sharia Securities that provide fixed income with a maturity of 1 (one) year or more, including convertible fixed income Sharia Securities.
3) *Sukuk*-Based Sharia Mutual Funds are Sharia Mutual Funds that invest in one or more *Sukuk* with a composition of at least 85% (eighty five percent) of the Net Asset Value of Sharia Mutual Funds invested in *Sukuk* offered in Indonesia through Public Offerings, Certificates State Sharia securities, and/or sharia commercial securities with a maturity of 1 (one) year or more and are categorized as investment grade and included in Collective Custody at the Depository and Settlement Institution by the issuer of sharia commercial securities.
4) Overseas Sharia Securities-Based Mutual Funds are Sharia Mutual Funds that invest at least 51% (fifty one percent) of the Net Asset Value of Sharia Mutual Funds in Foreign Sharia Securities listed in the Sharia Securities List issued by the Issuing Party. List of Sharia Securities.
5) Sharia Securities List is a Sharia Securities List as referred to in the laws and regulations in the Capital Market sector that regulate the criteria and issuance of the Sharia Securities List.
6) The Issuing Party of the Sharia Securities List is the Issuing Party of the Sharia Securities List as referred to in the laws and regulations in the Capital Market sector which regulates the criteria and issuance of the Sharia Securities List.

7) Overseas Sharia Securities are Sharia Securities offered through Public Offerings and/or traded on foreign Stock Exchanges and are listed in the Sharia Securities List issued by the Sharia Securities List Issuer.
8) Sharia Principles in the Capital Market are islamic legal principles in Sharia activities in the Capital Market based on fatwas of the National Sharia Council - Indonesian Ulema Council, so long as the relevant fatwa does not conflict with the Financial Services Authority Regulation on the Application of Sharia Principles in the Capital Market and/or other Financial Services Authority Regulations based on fatwas of the National Sharia Council - Indonesian Ulema Council.

2.3.2. Types of Sharia Mutual Funds

In general, mutual funds can be categorized into the following categories dependant on their investment ideologies:

1) Money market mutual funds, these are mutual funds that invest in money market securities such as commercial notes, repurchase agreements, or certificates of deposit.
2) Stock mutual funds, is a stock mutual fund that will generally hold money market securities of 4%-5% of its total assets to provide the liquidity needed to meet stock redemption needs
3) Bond Mutual Funds (Fixed Income Mutual Funds), this Mutual Fund is specialized in the fixed income sector.
4) Asset allocation mutual funds and flexible mutual funds, these are asset allocation mutual funds and flexible mutual funds are similar to balanced mutual funds in that they both hold stocks and bonds.
5) Balanced mutual funds (mixed mutual funds), this Mutual Fund is designed to be a candidate for a comprehensive portfolio of individuals.
6) Index Fund is an index mutual fund that buys shares belonging to a certain index group in a proportion that represents that index.

2.4. Mutual Fund Risk

According to (Fahmi, 2015), risk may be defined as a form of uncertainty regarding a situation that will occur in the future as a result of actions made at this time based on a variety of reasons. Because the occurrence of risk is always directly tied to the decision that is made about an investment, risk is utilized as the primary barometer in the analysis of the investment selections that are to be made.

As said by (Halim, 2015), risk in the context of a portfolio is classified into two categories: market risk and credit risk. Diversification cannot remove systematic risk since swings in risk are impacted by macro factors that might affect the market as a whole. For instance, there are fluctuations in interest rates, government policies, and exchange rates. Unsystematic risk is a risk that can be minimized through diversification, as it is unique to a single firm or industry. For instance, capital structure, assets, and profit levels.

2.5. Mutual Funds Return Rate

According to (Fahmi, 2015), the yield or rate of return is the profit earned by corporations, individuals, and institutions from the consequences of investment plans that have been implemented. According to (Halim, 2015), the rate of return is the investment

reward. The rate of return component is comprised of two parts, namely the rate of return and the rate of return plus inflation. Profit or loss from capital gains (loss) and Yield (yield) refers to the income or cash flow received periodically by investors, such as dividends. The rate of return is stated as a percentage.

2.6. Relationship of Risk and Rate of Return of Mutual Funds

Risk and rate of return are conditions faced by corporations, institutions, and individuals for investment decisions made, both in the form of losses and profits in an accounting period (Fahmi, 2015). In investment, there is a significant relationship between risk and rate of return. In this case, if the risk is high, the rate of return will be high as well. In contrast, if the rate of return received is low, the dangers encountered will be minimal as well.

Investors anticipate a high rate of return on their investments, but they must also evaluate the investment's inherent dangers (Tandelilin, 2017). The link between risk and return is unidirectional, with risk increasing as return increases.

2.7. Mutual Fund Performance Measurement

Net Asset Value is a mutual fund whose function is to collect assets from individual investors and to share claims in assets among investors. The value of net assets is equal to assets minus liabilities which are presented in units of per share.

$$Net\ Asset\ Value = \frac{assets\ market\ value - liabilities}{number\ of\ shares\ outstanding}$$

2.7.1. Mutual Fund Risk

According to (Halim, 2015), Mutual Fund performance is not only seen from the rate of return but also from other factors, namely portfolio risk. One of the risk measurements in Mutual Funds is the Sharpe index. Portfolio performance in this method is measured by comparing the portfolio risk premium (the difference between the average portfolio return and the risk-free interest rate) and the portfolio risk expressed by the standard deviation. Mutual fund risk can be determined mathematically as follows.

$$Sp_i = \frac{Rp_i - R_f}{SDp_i}$$

Information:
Sp_i = Sharpe index portfolio i
Rp_i = average return on portfolio i
R_f = average risk-free investment interest
SDp_i = standard deviation of portfolio returns i

The Sharpe index is essentially used to calculate the slope of the line connecting risky portfolios with risk-free interest. The large slope of the line indicates the better the portfolio that forms the line. This Sharpe index is relevant for investors who invest only or most of their funds in the portfolio so that risk is expressed in standard deviation.

2.7.2. Mutual Funds Return Rate

The rate of return on a Mutual Fund is measured as an increase or decrease in the value of net assets plus distributions of income such as dividends or distributions of capital gains shown as a fraction of the value of net assets at the beginning of the investment period. The formula for the rate of return on mutual funds is as follows.

$$Rate\ of\ return = \frac{NAV_1 - NAV_0 + Distribution\ of\ capital\ income}{NAV_0}$$

Information:
NAV_1= Net Asset Value in 1st period
NAV_0= Net Asset Value at the beginning of the period

2.7.3. Mutual Fund's realized rate of return

According to (Jogiyanto, 2015) that the realized rate of return can be measured using the following formula.

$$Rate\ of\ return = \frac{NAB_1 - NAB_{t-1}}{NAB_{t-1}}$$

Information:
NAB_1= Value of net assets currently

3. RESEARCH METHODS

3.1. Research Design

The research is descriptive quantitative in nature, in the notion that the data is presented as numbers, which are then examined, and the findings can be used to generalize the performance of Fixed Income Sharia Mutual Funds.

3.2. Variable Operational Definition

1) Mutual Fund Risk

According to Jogiyanto (2015), risk is the variance in the rate of return of the securities that make up the portfolio. The securities in this study used are monthly fixed income sharia mutual funds. Risk can be measured as follows.

$$Var\ (R_i) = \frac{\sum_{I=1}^{n}((Ri - E(R_I))^2}{n-1}$$

Information:
Var (Ri) = Variance of return on investment
E(Ri) = Rate of mutual fund expected return i
Ri = Rate of Realized returns from i mutual funds
N = Number of periods during the transaction

2) Mutual Funds Return Rate

According to Jogiyanto (2015), the rate of return can be divided into two types, namely the realized rate of return and the expected rate of return. The realized rate of return is used to measure the rate of return of each security in the portfolio. The rate of return can be measured as follows.

$$R_I = \frac{NAB_t - NAB_{t-1}}{NAB_{t-1}}$$

Information:

Ri = Return on Investment
NABt = NAV of current month
NABt-1 = NAV of last month

3.3. Data and Data Sources

This study uses secondary data in the form of data on the monthly net asset value (NAV) of Fixed Income Sharia Mutual Funds traded on the Indonesia Stock Exchange during the 2018-2020 period. Data can be accessed from Mutual Fund trading activities published by the Indonesia Stock Exchange through the www.infovesta.com, www.idx.co.id and www.bareksa.com websites.

3.4. Data Retrieval Methods

The entire element that is the subject of a study is referred to as the population. This research looked at all forms of fixed income Islamic mutual funds that were listed on the Indonesia Stock Exchange between 2018 through 2020. The samples utilized in this study were selected using the judgement sampling approach, which involves selecting samples based on a set of criteria. The following were the sample criteria employed in this study:

a) The sample used is Fixed Income Sharia Mutual Funds listed on the Indonesia Stock Exchange in 2018-2020
b) The sample that must be selected must be Fixed Income Sharia Mutual Funds that are actively operating during the research period, namely January 2018 to December 2020
c) The sample that must be selected must be Fixed Income Sharia Mutual Funds that have the highest, middle, and lowest net asset values operating during the research period, namely January 2018 to December 2020.

3.5. Method of collecting data

The data collection method in this study uses documentation techniques. Documentation technique is a technique by searching for published data that is secondary. Secondary data was obtained from the publications of the Indonesia Stock Exchange, Financial Services Authority (OJK), Bareksa and Infovesta.

3.6. Data analysis method

3.6.1. Determining the Risk Level of Mutual Funds

1) Determination of the Mutual Fund variance

$$Var\ (R_i) = \frac{\sum_{I=1}^{n}((Ri - E(R_I))^2}{n-1}$$

Information:
Var (Ri) = Variance of return on investment
E(Ri) = Rate of mutual fund expected return i
Ri = Rate of Realized returns from i mutual funds
N = Number of periods during the transaction

2) Determination of the standard deviation of the Mutual Fund

$$\sigma i = \sqrt{var(E(R_I)}$$

Information:
σi = Mutual fund standard deviation
Var (Ri) = Variance of return on investment

3) Determination of Mutual Fund covariance

$$COV_{(A,B)} = \sum_{t=1}^{n}(P_i)((R_{AI} - E(R_i))\ (R_{Bi} - E(R_B))$$

Information:
Pi = probability of achieving the rate of return
RAi = realized rate of return from investment in stock A in state i
RBi = realized rate of return from investment in stock B at state i
E (RA) = the expected rate of return on investment in A shares
E (RB) = expected rate of return from investment in B shares

3.7. Measuring Fixed Income Sharia Mutual Fund Performance

The rate of return approach is used to determine whether the performance of Fixed Income Sharia Mutual Funds is good or bad. The higher the rate of return, the better, or in other words, the value of the rate of return is positive, the performance of Sharia Fixed Income Mutual Funds is good, and vice versa, if the rate of return is negative, the performance is bad. The risk method is based on the findings of calculating the standard deviation of returns for Sharia Fixed Income Mutual Funds. The greater the standard deviation of returns, the worse the performance, and vice versa, the lower the standard deviation of returns, the better the performance.

4. RESULTS AND DISCUSSION

4.1. Results Research

4.1.1. Data analysis

Based on the statistics provided by (PT. Bareksa Investment Portal, 2018-2020), only 36 businesses are actively listing and submitting financial statements for fixed income sharia mutual funds throughout the period of 2018 to 2020, as opposed to the prior number of 40 companies.

The Performance of Fixed Income Sharia Mutual Funds in 2018 showed a high profit of 6.44 percent. This profit growth exceeded the reference index of Fixed Income Sharia Mutual Funds which had a profit of only 1.38 percent. The performance of Fixed Income Sharia Mutual Funds in 2019 also experienced an increase where the performance index had a value of 8.81 percent higher than in 2018.

The performance of Fixed Income Sharia Mutual Funds in 2020 also showed positive performance although it experienced a decline compared to the performance in 2019. The performance showed a value of 4.95 percent. Net Asset Value (NAV) in 2020 was only Rp. 5.6 trillion, so it decreased by 7.88 percent compared to 2019. NAV in 2019 reached Rp. 6.09 trillion. The performance of Fixed Income Sharia Mutual Funds decreased in 2020 due to the COVID-19 condition which resulted in economic difficulties for the community, where people lacked funds to invest in the capital market.

4.1.2. Risk Measurement

The first Fixed Income Sharia Mutual Fund performance analysis tool is risk, which is measured by the standard deviation of the monthly rate of return. The standard deviation is calculated every month with the highest, average, and lowest results of Fixed Income Sharia Mutual Funds in 2018, 2019, and 2020. The results of the calculation of the standard deviation to measure the risk of monthly Fixed Income Sharia Mutual Funds can be seen in table 4.2 as follows.

Table 1. Risk Measurement Results (Standard Deviation) of Monthly Fixed Income Sharia Mutual Funds for 2018-2020 (in Percentage)

Period	Month	Risk	Standard Deviation
2018	January to December	Highest (October)	0.956
		Lowest (November)	0.001
		Average	0.123
2019	January to December	Highest (June)	0.961
		Low (April)	0.271
		Average	0.591
2020	January to December	Highest (December)	0.651
		Low (July)	0.004
		Average	0.293

Source: Data processed

The results of the evaluation of the monthly standard deviation for fixed income sharia mutual funds are shown in table 1; the maximum risk value is 0.961% in June 2019 and the average is 0.59%. July 2020 posed the lowest danger, at 0.004 percent. The conclusion of the risk calculation for Islamic funds with fixed income is that the risk is greater in 2019 and 2018 and lower in 2020.

4.1.3. Rate of Return Measurement

The monthly rate of return is the second performance analysis measure for Fixed Income Sharia Mutual Funds. The rate of return is obtained by analyzing the highest, average, and lowest January-December figures for 2018, 2019, and 2020. Table 2 displays the results of determining the monthly rate of return for Fixed Income Sharia Mutual Funds.

Table 2. Results of Realization and Expected Returns for Monthly Fixed Income Sharia Mutual Funds for 2018-2020

Period	Month	Information	Ri (%)	E(Ri)%
2018	January to December	Highest (October)	0.187	5.063
		Low (June)	-0.162	-4,931
		Average	-0.024	-0.655
2019	January to December	Highest (June)	0.188	5.086
		Lowest (December)	-0.133	-3.601
		Average	0.155	3,130
2020	January to December	Highest (December)	0.127	3,447
		Lowest (February)	-0.046	-1,265
		Average	0.057	1.522

Source: Data processed

Based on table 2 in column Ri, it shows that the highest realized rate of return for Fixed Income Sharia Mutual Funds received by investors in June 2019 was 0.188 percent. The lowest realized rate of return received by investors was -0.162 percent in June 2018, and the highest average realized rate of return received by investors was 0.155 in 2019. In 2018, 2019, and 2020, the highest, lowest, and average realized rates of return are lower than the predicted rate of return, indicating that the performance of Sharia mutual funds remains poor.

4.1.4. Risk Adjusted Performance Measurement

Mutual fund performance measurement must be in accordance with risk. There are three approaches to measuring this risk, namely the Teynor Index, The Jensen Index, and the Sharpe Index. The measuring instrument used in this study is the Sharpe Index. The Sharpe Index is used with consideration because the Sharpe Index can be used to measure the performance of all types of mutual funds, including fixed income sharia mutual funds. The Sharpe Index is used as a comparison measure between the portfolio risk premium and the risk expressed in standard deviation. The result of the calculation of the Sharpe Index are as follows:

Table 3. Sharpe Index Results In 2018-2020

Year	Month	Sharpe Index
2018	November	-7,239
2019	June	-4,6563
2020	June	-7,3006

Sharpe Index shows the best performance of fixed-income sharia mutual funds in 108-2020, which occurred in 2019 right in June with a large value of -4.6563 percent the worst fixed-income sharia mutual fund performance in November 2020 was -7.3006 percent.

4.2. Discussion

In October 2018, based on the findings of risk calculations for Fixed Income Sharia Mutual Funds, the greatest standard deviation value was 0.956%. A large standard deviation signifies a high level of risk, but also a high rate of return for investors. In October 2018, investors obtained a higher rate of return than to preceding months, 0.187 percent. In agreement with Fahmi's (2015) theory, these findings demonstrate that the relationship between risk and return is linear or unidirectional. The relationship can be viewed as follows: the greater the risk, the greater the return.

During 2018-2020, the performance of Fixed Income Sharia Mutual Funds was influenced by changeable situations. The findings of the computation of the rate of return indicate that the value fluctuates during 2018-2020, with the highest rate of return in 2018 occurring in October at 0.187 percent. In 2019, the greatest return rate was 0.188 percent, while in 2020 it was 0.127 percent. According to (Yudawanto, 2017), the objective of this study was to examine mutual fund performance using the Sharpe, Treynor, and Jensen methodologies. The result is that there is no fixed income mutual fund performance value that consistently delivers positive performance, with the exception of the Danamas Mutual Fund, which has positive performance.

5. CONCLUSION

On the basis of the data analysis and discussion of the research findings, it can be inferred that First, the findings of the risk calculation indicate that the performance of Fixed Income Sharia Mutual Funds in 2020 is superior to that of 2018 and 2019. Furthermore, based on the findings of the calculation of the rate of return, the month of June in 2019 yields the greatest profit for investors. Finally, it is less advantageous to invest in Fixed Income Sharia Mutual Funds than in Bank Indonesia Certificates.

As a result of the findings, the study is in a place to determine the following suggestions: Prior to selecting investment facilities, investors should consider the benefits and risks that will be encountered, and they should select the performance of companies that provide positive benefits to avoid losses. Additionally, investors should select an investment vehicle that is both profitable and secure, such as investing in certificates. Bank Indonesia.

REFERENCES

Aminah, L. S. (2021). The Effect of Current Ratio, Net Profit Margin, and Return on Assets on Stock Return (Study on Food and Beverages Companies Listed on the Indonesia Stock Exchange 2015-2017 Period). *MARGINAL : Journal of Management, Accounting, General Finance And International Economic Issues*, *1*(1), 1–9. https://doi.org/https://doi.org/10.55047/marginal.v1i1.8

Anggara, A. (2017). Analisis Kinerja Reksa Dana Saham Dengan Metode Sharpe, Treynor Dan Jensen. *Management Analysis Journal*, 13-22.

Bodi, K. (2014). *Manajemen Portofolio dan Investasi, Edisi 9 Buku 1.* Jakarta: Salemba Empat.

Fahmi, I. (2015). *Pengantar Teori Portofolio dan Analisis Investasi.* Bandung: Alfabeta.

Gitman, J. (2017). *Fundamental of Investing.* New York: Pearson.

Halim, A. (2015). *Analisis Investasi dan Aplikasinya.* Jakarta: Salemba Empat.

Jogiyanto. (2015). *Teori Portofolio dan Analisis Investasi Edisi 10.* Yogyakarta: BPFE Yogyakarta.

OJK. (2015). *POJK Nomor 19/POJK.04/2015 tentang Penerbitan dan Persyaratan Reksa Dana Syariah.*. Jakarta: Otoritas Jasa Keuangan.

OJK. (2019). *Penerbitan dan Persyaratan Reksadana Syariah Nomor 33 /POJK.04/2019.* Jakarta: Otoritas Jasa Keuangan.

Pratiwi, N. (2017). Analisis Perbandingan Kinerja Reksadana Saham Syariah dan Reksadana Konvensional (Reksadana yang Terdaftar pada OJK Tahun 2013-2015). *EKONOMIKA SYARIAH: Journal of Economic Studies*, 48-60.

Sumarmo, S. Y. (2019). Perbandingan Kinerja Investasi Saham Syariah Dan Konvensional Dalam Menentukan Kebijakan Investasi. *JURNAL MADANI: Ilmu Pengetahuan, Teknologi, dan Humaniora*, 175-186.

Tandelilin, E. (2017). *Analisis Investasi dan Manajemen Portofolio.* Yogyakarta: BPFE .

Yudawanto, A. (2017). Analisis Kinerja Reksa Dana Pendapatan Tetap Dengan Metode Sharpe, Treynor Dan Jensen. *Jurnal Administrasi Bisnis (JAB)|Vol. 45 No. 1*, 125-132.

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