FACTORS AFFECTING FIXED INCOME MUTUAL FUND PERFORMANCE
(Study on Fixed Income Mutual Fund on Indonesia Period 2015-2017)

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PANEL OF EXAMINERS
APPROVAL SHEET

The Panel of Examiners declare that the skripsi entitled "FACTORS AFFECTING FIXED INCOME MUTUAL FUND PERFORMANCE (Study on Fixed Income Mutual Fund on Indonesia Period 2015-2017)" that was submitted by Gusti Harjomulyo Siswanto majoring in Management from the Faculty of Business was assessed and approved to have passed the Oral Examinations on February 14, 2019.

Panel of Examiners

Ir. Eko Garniato, MM
Chair - Panel of Examiners

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Examiner 2
DECLARATION OF ORIGINALITY

I declare that this skripsi, entitled “FACTORS AFFECTING FIXED INCOME MUTUAL FUND PERFORMANCE (Study on Fixed Income Mutual Fund on Indonesia Period 2015-2017)” is, to the best of my knowledge and belief, an original piece of work that has not been submitted, either in whole or in part, to another university to obtain a degree.

Cikarang, Indonesia, January 19, 2019

Gusti Harjomulyo Siswanto
# PLAGIARISM REPORT

Evaluating factors affecting fixed income mutual fund performance

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ACKNOWLEDGEMENT

Praise and gratitude to God who has bestowed His blessings upon me and given me health so that I have the opportunity to complete this thesis entitled “Factors Affecting Fixed Income Mutual Fund Performance (Study on Fixed Income Mutual Fund on Indonesia Period 2015-2017)”. This thesis was written with the purpose of fulfilling one of the requirements of obtaining Bachelor Degree in Management at President University. The completion of this thesis is inseparable from the help of various parties, therefore, I would like to thank all the parties who have supported me and guided me in the making of this thesis. I would like to express my gratitude to:

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The writer realizes that this thesis still has many shortcomings. Therefore, the writer will gladly accept any suggestions or constructive criticisms for the betterment of this thesis.

Cikarang, January 19, 2019

Gusti Harjomulyo Siswanto
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ABSTRACT

The aim of the research is to analyze the influence of Past Performance, Fund Age, Asset under Management, and Risk towards the performance of fixed income mutual fund in Indonesia for the period of 2015-2017 by using Sharpe Ratio as a measurement tool. The population of this research consisted of 306 fixed income mutual fund products in Indonesia. This research is implementing a purposive sampling method to gain 36 sample from the population. Data conducted are secondary data taken from Bareksa. The technique used in this research is multiple regression analysis. The result shows that Past Performance and Risk have insignificant positive effect on the performance of fixed income mutual fund, and Fund Age shows a significant positive effect towards the performance of fixed income mutual funds. Meanwhile, Asset under Management has insignificant negative effect on the performance of fixed income mutual funds.

Keywords: Past Performance, Fund Age, Asset under Management, Risk, Performance of Fixed Income Mutual Fund
CHAPTER I
INTRODUCTION

1.1 Background
In the current era of globalization, the level of economic growth of country has become a “general reference” to determine the country’s progress. The developing countries have higher growth rates than developed countries because developing countries is continuing to improve their sustainable development while developed countries also improve the sustainable development but not as much as developing countries.

Indonesia is one of the developing countries with the fourth-largest population size in the world, the tenth-largest economy in the world based on purchasing power parity, and the economic growth rate of 5.07% where the inflation rate is 3.61% in the period of 2017. More over the economic development is quite strong. The national gross income per capita reached IDR 51.89 million 2017 (Badan Pusat Statistik, 2018).

The growth of income per capita that occurs in Indonesia causes money or wealth owned by society to increase. By increasing wealth, society need to maximize their wealth through various methods, one of them is with investment. Investment is a process of saving more broadly in order to make a material result or profit in the future (Farlex, Inc., 2009).

One of the promising investment is fixed income mutual funds or mutual fund which invest in bonds or securities. Mutual fund occurs as one of the investment instruments designed in order to raise funds from society who have capital and desire to invest, but only have limited time and knowledge (Manurung, 2008). In addition to overcome the problem of knowledge, mutual funds are the way to overcome the limited funds to create an optimal portfolio and limited information to do various analyzes, research, and investment transactions to obtain optimal returns. By the existence of mutual funds as a new solution where an investor can do diversification without having a sufficient knowledge or it means investors need to know which mutual fund products are
purchased and do not need to sacrifice time to choose and monitor them continuously in order to pay attention to market conditions.

Mutual funds have various forms, such as equity mutual funds, fixed income mutual funds, money market mutual funds, and mixed mutual funds. Equity mutual funds are the mutual funds that invest at least 80% of the portfolio owned into stocks. Fixed income mutual funds are the mutual funds that place at least 80% of their investments in bonds or term bonds. Money market mutual funds are the mutual funds that carry out most of their investments into term debt securities less than a year. Lastly, mixed mutual funds are mutual funds that invest in three instruments, which are stocks, bonds, and other securities. One of the attractive form of mutual funds is fixed income mutual funds because the risk is relatively lower than equity mutual funds but still provides high return (Bareksa, 2017).

**Figure 1.1: Highlights of mutual funds in Indonesia based on Asset under Management**

![Bar Chart](image)

**Source:** (Bareksa, 2017), with Writer Adjustment

According to Bareksa (2017), it shows that total Asset under Management of equity mutual fund has increased to IDR 16 trillion. Interestingly, fixed income mutual funds
are in the spotlight throughout 2017, with the amount of Asset under Management has increased significantly to IDR 41.48 trillion (Bareksa, 2017). The Investment Director of Sucorinvest Asset Management said that there is an increase of interested people who try to enter the fixed income mutual fund sector (Kontan.co.id, 2017).

Previous research conducted by Damayanti and Cintyawati (Damayanti & Cintyawati, 2015) entitled "Developing an Integrated Model of Equity Mutual Funds Performance: Evidence from the Indonesian Mutual Funds Market" used nine variables in this study, consisting of past performance, fund age, asset under management, asset allocations, exchange rates, turn of the year effects, insurance and non-insurance companies, blue chips and non-blue chip stocks, and investor behavior. The study used 30 stock mutual funds in Indonesia that operated in the period of 2008-2014. The result of this study is only Asset under Management that has a negative impact on equity mutual funds while the other variables have a positive impact, even though some are insignificant, and the rest are significantly impact the performance of equity mutual funds. In this study, the variables used are only past performance, fund age, asset under management, with the addition of new variable, namely Risk.

Past performance is one of the benchmarks for investors in investing. In accordance with research conducted by Gupta (2015) which identifies a positive relationship between previous returns or past performance of a mutual fund with the growth of assets or investments. According to research conducted by Stambaugh (2001), stated mutual funds that have good past performance will be declined and those who have poor past performance will be increased. This is known as a “reversion in the mean”.

Some investors are more likely choosing investment instruments such as mutual funds that have a lot of investment and have long been traded. According to Moore (2016), other factors that influence the performance of mutual funds are fund age. This is because the longer the fund age that is traded indicates the mutual fund has good performance and remains as an investment choice by investors.

Asset under Management shows how much funds are managed by an investment company or investment manager. Research conducted by Ramesh (2012) found that
there is relationship between asset under management and the performance of mutual funds. According to research conducted by Indro (1999) proved that Asset under Management has the opposite effect on investment performance in equity mutual funds. This is because mutual funds that exceed the optimal limit will reduce the yield, known as a decrease in ‘return of scale’.

Having various types of investment instruments are good choice for the society to reduce risks in investing. Some investors are willing to bear greater risk because the greater the risk, the greater the results are obtained. Based on these facts, the investor’s decision to choose an investment instrument is strongly influenced by the level of courage in taking a risk. According to Chang (2004), in order to provide investors with higher return, the funds must have low standard deviation and beta.

1.1.1 Need for Study
There have been some researches with similar topic as this study before. However, different from those researches, this study will use fixed income mutual fund in Indonesia and Risk into its variable with different period. The reason why this study is needed because the influence of the variables used might be differ between other types of mutual fund. As a result, this study could help investors to have a better understanding about factors that affects the performance of fixed income mutual funds.

1.2 Problem Statement
The amount of mutual fund is increasing every year, especially fixed income mutual fund. This increase is due to the increase of public interest in mutual fund as it comes as new solution where an investor can do diversification without having a sufficient knowledge or it means investors need to know which mutual fund products are purchased without need to sacrifice time to choose and monitor them continuously in order to pay attention to market conditions. In addition, in order to choose mutual fund, it must be done carefully because some of mutual funds do not provide the high profit and even suffer losses. In response to this problem, this study wants to analyze further the several indicators that can influence the performance of fixed income mutual fund performance such as Past Performance, Fund Age, Asset under Management, and Risk.
1.3 Research Questions

Based on the description above, the problems that will be discussed in this research are:

1. Does Past Performance have a significant effect on the Performance of Fixed Income Mutual Fund in Indonesia based on the Sharpe Ratio for the period of 2015-2017?
2. Does Fund Age have a significant effect on the Performance of Fixed Income Mutual Fund in Indonesia based on the Sharpe Ratio for the period of 2015-2017?
3. Does Asset under Management have a significant effect on the Performance of Fixed Income Mutual Fund in Indonesia based on the Sharpe Ratio for the period of 2015-2017?
4. Does Risk have a significant effect on the Performance of Fixed Income Mutual Fund in Indonesia based on the Sharpe Ratio for the period of 2015-2017?
5. Does Past Performance, Fund Age, Asset under Management, and Risk have a simultaneously effect on the Performance of Fixed Income Mutual Fund in Indonesia based on the Sharpe Ratio for the period of 2015-2017?

1.4 Research Objectives

Based on the above problems, then the purpose of this study are:

1.5 **Significance of the Study**  
The research will provide benefit to the following:  
**For the Writer**  
This research is useful for writer to broaden knowledge and apply the theories gained by the writer during his university life, especially those related to the influence of Past Performance, Fund Age, Asset under Management, and Risk towards the performance of Fixed Income Mutual Fund in Indonesia.  
**For the Investors**  
This research is useful as an input in knowing what factors influence the performance of Fixed Income Mutual Funds in Indonesia in terms of Past Performance, Fund Age, Asset under Management, and Risk variables so that investors can take corrective steps to ensure profits from the investment return on fixed income mutual funds.  
**For Future Researchers**  
This research is expected to be useful for future researchers as relevant and reliable guidance information with similar topic in the field of fixed income mutual fund’s performance.  

1.6 **Limitation**  
There are several limitations in conducting this study. First, this study aims to determine the factors that influence the performance of fixed income mutual funds in Indonesia. The performance of mutual fund is only viewed from Sharpe Ratio method. In addition, this research is limited only to four variables, such as Past Performance, Fund Age, Asset under Management, and Risk. The last limitation is the period used in this research is relatively short because data used is limited to the period 2015-2017 while other researchers use the longer period for their research purposes.
1.7 Organization of the Skripsi

The systematics of writing on this skripsi are as follows:

Chapter I: Introduction
This chapter describes the background of conducting the research, the need for study, formulation of the research problem, research questions, research objectives, significance of the study, limitation of the study, and organization of the skripsi.

Chapter II: Literature Review
This chapter will be focused on those literature reviews which are relevant to the study. The focus of the discussion will be on the specific explanation of dependent and independent variables used in this study, overview of previous research which had been done, and the research gaps.

Chapter III: Research Methods
This chapter will be focused on methods which are relevant to the study. The focus of the discussion will be on research model, the description of hypothesis, the information of operational definitions of each variable, the instrument used in order to test the hypothesis, types of the research, population and how they were sampled, methods used to collect the data, operational definition of variable, and the method of data analysis.

Chapter IV: Data Analysis
This chapter describes the results of data analysis consisting descriptive statistics and classical assumption tests, the results of hypothesis testing using multiple regression test, and the discussion about the impact of independent variables to dependent variable.

Chapter V: Conclusion
This chapter consist of summary or conclusions of the research and recommendations for investors, investment managers, and future researchers.
CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Review

The Indonesian Accountant Association (IAI) in the PSAK defines investment as an asset used by companies for wealth growth through distribution of investment returns (such as: interest, royalties, dividends and rent) to obtain an appreciation of the value of investments and / or to obtain other benefits such as benefits obtained through trade relationships for companies that are investing (Damayanti & Cintyawati, 2015). According to Horn (2008), investment is an activity carried out by utilizing cash in the present, with the aim of producing "rewards" in the future.

Economic theory defines investment as the expenditures to buy capital goods and production equipment with the aim of replacing and increasing the capital goods in the economy which will be used to produce goods and services in the future. In simple terms, investment can also be interpreted as an activity of putting fund on one or more of an asset for a certain period in order to earn income or increase the value of investment (Harianto, 2001).

Investors invest in a country based on their objectives and considerations that the level of profits obtained will be greater than if they invest funds in the bank, or if they invest their capital in their own country (for foreign capital). In addition, investors invest in order to maintain while avoiding losses caused by the decrease in value of money. Investors aim to invest more based on economic considerations and orientations such as the opportunity to make a profit.

Mutual funds are places used to collect funds from the investors, which are invested by investment managers in securities portfolios (Otoritas Jasa Keuangan, 2018). So, mutual funds are the collection of funds from the community that are managed in the form of securities portfolios. As an alternative investment, mutual funds have been known since the 19th century. In the United Kingdom, mutual funds known as Unit Trusts, in the
United States are called Mutual Funds, and in Japan are called Investment Trusts. Unit Trusts means unit (stock) of trust. This means that investing in mutual funds, these funds will be managed by other trusted parties. Mutual Funds means managed funds that have been collected that are invested in the mutual funds issued, whereas Investment Trusts means managing funds for investment based on trust (Haymans, 2002).

According to Sudarsono (2004), mutual fund is the ‘vehicle’ used to collect public funds (investors) to be invested into the securities portfolio by the investment manager. The securities portfolio can be in the form of stocks, bonds, money market instruments, or the combination between them.

There are several benefits that can be obtained by investors if investing in mutual funds. According to Sunariyah (2000), the first is to obtaining dividends and interest. Investment in stocks allows to provide income in the form of dividends, while interest is the result of investments such as deposits and bonds. Capital gain distribution is profit paid to the mutual fund holder for each share of mutual fund owned. The second is investment diversification and the spread of risk. Portfolio diversification of a mutual fund will reduce risk because mutual fund assets are invested in various types of securities so the risk is also spread. The third, the price of mutual funds does not depend too much on the exchange stock price. If the stock price in the stock market decreases in general, the investment manager will divert the investment into other investment instruments, such as the money market in order to keep investment for investors always profitable. Last, liquidity are guaranteed. Investors can redeem their participation unit at any time according to the provisions made by each mutual fund making it easier for investors to manage their cash. The open-end fund is obliged to buy back the participation unit so that it is highly liquid.

Fixed income mutual funds focus on investment in government bonds and companies. These mutual funds with investments that are at least 80% of managed funds (assets) in the form of debt securities (Bareksa, 2017). Comparing to money market mutual funds, these mutual funds are more profitable because corporate bonds will usually provide
relatively higher interest rates than deposits or government bonds that attracts more investors. However, the risks in these mutual funds rather than money market mutual funds is relatively larger too. This type of fixed income mutual fund is suitable for investors have medium-term investment objectives.

2.1.1 Dependent Variable
In order to complete this skripsi, the writer has a dependent variable. A dependent variable is a variable what is being examined and measured during the observation. In this skripsi, the dependent variable used is fixed income mutual funds’ performance. The performance of mutual funds can be measured using Sharpe Ratio (Damayanti & Cintyawati, 2015). Sharpe ratio is calculated using the following formula:

\[
Sharpe Ratio_t = \frac{R_p - R_f}{\sigma_p}
\]

**Source:** (Ginting, 2010)

where:

SR= Sharpe Ratio

t = Year

Rp = Return of portfolio

Rf = Risk-Free rate

\(\sigma_p\) = Standard deviation of portfolio’s excess return,

Performance measurement using Sharpe ratio contains two factors, namely the yield above the risk-free interest rate and the yield stability reflected in the standard deviation. Based on the research conducted by Ginting (2010), Return of portfolio is the excess value of the portfolio over the initial investment while risk free rate is the rate of
investment that has no risk (deposit and government bond), and standard deviation is the fund fluctuates in relation to its mean return.

2.1.2 Independent Variables

Independent variables are the variables that influence or cause the changes in the emergence of dependent variables. Based on research conducted by Damayanti and Cintyawati (2015) found that Past Performance, Fund Age, and Asset under Management affect the performance of equity mutual funds. Karlsson (2005) found that Risk affect the performance of mutual funds negatively using beta. They found that the higher beta value will provide the higher return for investors. This is something unusual because the performance of equities would be worse if the beta is higher in a recession period. Consequently, the writer uses Past Performance, Fund Age, Asset under Management, and Risk as the independent variables to test the dependent variable (fixed income mutual fund).

2.1.2.1 Past Performance

Past Performance is the performance of previous mutual funds that can be used as the measurement of mutual fund performance in the future. This is in line with the research conducted by Goel (2012) which states that Past Performance is the performance of mutual fund schemes in the previous period can act as an indicator of future performance. According to Winingrum (2011), the performance of previous mutual funds reflects the rate of return given by mutual funds to investors. This is very useful for investors to choose the right investment so that they can provide positive returns.

\[
\text{Sharpe Ratio} = \frac{R_p - R_f}{\sigma_p}
\]

**Source:** (Ginting, 2010)

2.1.2.2 Fund Age

Fund Age is an indication of when a mutual fund starts trading on the market. Many investors are more likely to invest in long-traded mutual funds (Damayanti &
According to Akbarini (2004), Fund Age is a type of numeric category which can indicate the age of each mutual fund calculated from the date that the mutual fund is effectively traded to the market. According to Rao (2000), mutual funds that have the longer age will have the longer track record and can provide investors with the better picture of mutual fund performance.

2.1.2.3 Asset under Management
Asset under Management is the total net asset value under the mutual fund management at the end of the transaction period per year (Bhatt & Vijay, 2015). According to Lobao and Gomez (2015), the amount of funds contained in total Asset under Management is represented by the amount of the net asset value on the last day of the transaction period each month. According to Bareksa (2017), Asset under Management is the total value of capital deposited by investors from mutual fund. From the three theories above, it can be concluded that Asset under Management is the sum total of fund deposited by investors to be managed by investment managers based on net asset value at the end of each transaction period.

2.1.2.4 Risk
Researchers believe that when investing in mutual funds, it may impossible to avoid risks. In the long run, investors who take on higher risk will be rewarded for higher return on their investment (J. D. Peterson, 2001). The simple ways of measuring risk in mutual fund usually use beta or standard deviation. According to Bodie (2003), beta is the most appropriate measurement when investor invest in different mutual fund where the individual portfolio or asset are compared to market, because beta measures systematic risk of investor’s portfolio or asset.

\[
\beta_p = \frac{\text{Cov}(r_p, r_b)}{\text{Var}(r_b)}
\]

Source: (Ginting, 2010)
Where:

$\text{COV}(R_p, R_b) =$ the covariance between the return of asset $p$ and the market $b$

$\text{VAR}(R_b) =$ the market variance

$\beta_p =$ the estimated systematic risk of asset $p$

2.2 Research Gaps

Research conducted by Damayanti and Cintyawati (2015) entitled "Developing an Integrated Model of Equity Mutual Funds Performance: Evidence from the Indonesian Mutual Funds Market", there are nine variables consisting of past performance, fund age, asset under management, asset allocations, exchange rates, turn of the year effects, insurance and non-insurance companies, blue chips and non-blue chip stocks, and investor behavior. The study used 30 equity mutual funds in Indonesia that operated in the period of 2008-2014. The result of this study is only Asset under Management that has a negative impact on equity mutual funds while the other variables have a positive impact, even though some are insignificant, and the rest are significantly impact the performance of equity mutual funds.

Chen (2004), studied the effects of the component of independent variables, which are Risk Ratio, Fund Size, Expense Ratio, Turnover, and Fund Age. Chen (2004), found that there are significant negative relationships between Risk Ratio, Expense Ratio, Turnover, and Fund Age with the performance of mutual funds. Meanwhile, Fund Size has significant positive relationship with the performance of mutual funds.

Ginting (2010) examined the effect that Asset Allocation Policy, Stock Selection Skill, and Risk Level have on equity mutual funds. Ginting (2010) used Asset Class Factor Model, Treynor Method, and Single Index Method to determine the relationship between the performance of equity mutual funds with Asset Allocation Policy, Stock Selection Skill, and Risk Level. The results indicated that all of those variables have significant positive relationship with the performance of equity mutual funds.
In an attempt to investigate the effects that Risk Ratio, Fund Size, Expense Ratio, Turnover Ratio, and Fund Age have on the performance of equity mutual funds (See & Jusoh, 2012). They used Jensen’s measure, multiple linear regression model. Chen (2004) found that Fund Size has significant positive relationships with the performance of equity mutual funds, while Risk Ratio and Expense Ratio has insignificant positive relationship with the performance of equity mutual funds. In the other hand, the relationship between Turnover Ratio and Fund Age have significant negative relationship with the performance of equity mutual funds.

Table 2.1: Summary of Previous Researches

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</tr>
<tr>
<td>(Ginting, 2010)</td>
<td>Asset Allocation Policy</td>
<td>Performance of Equity Mutual Funds</td>
<td>Asset Allocation Policy has significant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Stock Selection Skill</td>
<td></td>
<td>Stock Selection Skill has significant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Risk Level</td>
<td></td>
<td>Risk Level has significant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td>(See &amp; Jusoh, 2012)</td>
<td>Risk Ratio</td>
<td>Performance of Equity Mutual Funds</td>
<td>Risk Ratio has insignificant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Fund Size</td>
<td></td>
<td>Fund Size has insignificant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Expense Ratio</td>
<td></td>
<td>Expense Ratio has significant positive impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Turnover Ratio</td>
<td></td>
<td>Turnover ratio has significant negative impact on equity mutual funds.</td>
</tr>
<tr>
<td></td>
<td>Fund Age</td>
<td></td>
<td>Fund Age has significant negative impact on equity mutual funds.</td>
</tr>
</tbody>
</table>

**Source:** Writer Adjustment, 2018
CHAPTER III

RESEARCH METHODS

3.1 Introduction

This chapter will be focused on methods which are relevant to the study. The focus of the discussion will be on research model, the description of hypothesis, the information of operational definitions of each variable, the instrument used in order to test the hypothesis, types of the research, population and how they were sampled, methods used to collect the data, operational definition of variable, and the method of data analysis.

3.2 Theoretical Framework

Figure 3.1: Theoretical Framework

Source: (Ginting, 2010)
3.3 Hypothesis
Based on the Research Model figure, the hypothesis of the research are formulated as below:

H$_1$: There is a significant effect of Past Performance on the Performance of Fixed Income Mutual Fund based on Sharpe Ratio.

H$_2$: There is a significant effect of Fund Age on the Performance of Fixed Income Mutual Fund based on Sharpe Ratio.

H$_3$: There is a significant effect of Asset under Management on the Performance of Fixed Income Mutual Fund based on Sharpe Ratio.

H$_4$: There is a significant effect of Risk on the Performance of Fixed Income Mutual Fund based on Sharpe Ratio.

H$_5$: There is an altogether effect of Past Performance, Fund Age, Asset under Management, and Risk on the Performance of Fixed Income Mutual Fund based on Sharpe Ratio.

3.4 Operational Definitions of Variables
The operational definitions of each of the variables that are used in this research will be provided in the table below in order to avoid possible differences in interpretations.

Table 3.1: Operational Definitions

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLE</th>
<th>Variable</th>
<th>Definition</th>
<th>Formula</th>
<th>Data Source</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y: Sharpe Ratio</td>
<td></td>
<td>The amount of risk premium for each unit of risk taken.</td>
<td>$Sharpe Ratio_t = \frac{R_p - R_f}{\sigma_p}$</td>
<td>Bareksa</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Variable</th>
<th>Definition</th>
<th>Formula</th>
<th>Data Source</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X$_1$: Past Performance</td>
<td>The amount of risk premium for each unit of risk taken.</td>
<td>$Sharpe Ratio_{t-1} = \frac{R_p - R_f}{\sigma_p}$</td>
<td>Bareksa</td>
<td>Ratio</td>
</tr>
</tbody>
</table>
### INDEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Formula</th>
<th>Data Source</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₂: Fund Age</td>
<td>The duration of the age in years.</td>
<td>( FA = t )</td>
<td>Bareksa</td>
<td>Ratio</td>
</tr>
<tr>
<td>X₃: Asset under Management</td>
<td>The amount of dollars the value of assets managed under the management of the investment manager.</td>
<td>( AUM = NAV \times \text{Total Unit} )</td>
<td>Bareksa</td>
<td>Ratio</td>
</tr>
<tr>
<td>X₄: Risk</td>
<td>The measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the entire market or a benchmark</td>
<td>( \beta_p = \frac{\text{Cov}(r_p, r_b)}{\text{Var}(r_b)} )</td>
<td>Bareksa</td>
<td>Ratio</td>
</tr>
</tbody>
</table>

**Source:** (Ginting, 2010), with Writer Adjustment, 2018

#### 3.5 Instrument

In order to perform test needed, writer uses IBM SPSS Statistics version 21 as data analysis tool. Data in this study analyzed by multiple linear regression models to answer the hypothesis will be supported by this tool. In addition, it will help the writer to conduct the classic assumption test and descriptive statistic test.

#### 3.6 Sampling

The focus of this study is truly directed in accordance with the research objectives, so it is necessary to limit the population in the form of research samples. The characteristics used in determining the sample in this study can be described as follows:

1. Conventional Fixed income mutual funds
2. Fixed income mutual funds using the Rupiah currency.
3. Active and effective fixed income mutual funds were registered by Capital Market Supervisory Agency during the period of 2015-2017.
4. Fixed income mutual funds that began to be active in period of 2014-2017. This is because the performance data used starts from 2015.

Based on the characteristics of the sample set in this study, it was obtained the number of fixed income mutual funds is 12.

**Table 3.2: Sample Size**

<table>
<thead>
<tr>
<th>No.</th>
<th>Manager Investment name</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT. PNM Investment Management</td>
<td>PNM Dana Bertumbuh</td>
</tr>
<tr>
<td>2</td>
<td>PT. Ashmore Asset Management Indonesia</td>
<td>Ashmore Dana Obligasi Nusantara</td>
</tr>
<tr>
<td>3</td>
<td>PT. Batavia Prosperindo Aset Manajemen</td>
<td>Batavia Dana Obligasi Andalan</td>
</tr>
<tr>
<td>4</td>
<td>PT. Insight Investments Management</td>
<td>Insight Scholarship Fund</td>
</tr>
<tr>
<td>5</td>
<td>PT. RHB Asset Management Indonesia</td>
<td>RHB OSK Smile Fixed Income Fund</td>
</tr>
<tr>
<td>6</td>
<td>PT. Samuel Aset Manajemen</td>
<td>SAM Cendrawasih Fund</td>
</tr>
<tr>
<td>7</td>
<td>PT. Eastspring Investments Indonesia</td>
<td>Eastspring Investments Yield Discovery</td>
</tr>
<tr>
<td>8</td>
<td>PT. Batavia Prosperindo Aset Manajemen</td>
<td>Batavia Dana Obligasi Sentosa</td>
</tr>
<tr>
<td>9</td>
<td>PT. Mega Asset Management</td>
<td>Mega Asset Mantap Plus</td>
</tr>
<tr>
<td>10</td>
<td>PT. Bahana TCW Investment Management</td>
<td>Bahana Provident Fund</td>
</tr>
<tr>
<td>11</td>
<td>PT. Reliance Manajer Investasi</td>
<td>Reliance Dana Terencana</td>
</tr>
<tr>
<td>12</td>
<td>PT. Yuanta Asset Management</td>
<td>Yuanta Fixed Income</td>
</tr>
</tbody>
</table>

**Source:** Writer Adjustment, 2018

### 3.7 Data Collection Method

Source data in this study are secondary data which means the data in this study are not obtained directly by the researcher, but come from other sources that are either directly / indirectly giving the data to researchers (Sugiyono, 2010). In this study, secondary data is data in the form of various documents, journals, websites, and other information related to research studies. Data used in this study consists of:

2. Data collection taken from several sources including the Bareksa, Capital Market Supervisory Agency, website, and studies from various articles, books, journals, and other sources related to mutual funds.

3.8 Data Analysis Techniques
Method of data analysis is the process of systematically compiling data has been obtained from the results of field observations and documentation by conducting data into categories, synthesizing, conducting analysis, and making conclusions to understand by others. Meanwhile, data analysis is simplifying data into forms that are easier to read. Study must interpret the results of data analysis with the aim of answering the questions of the researcher (Ghozali, 2009).

The following steps are done to answer the hypothesis:

3.8.1 Descriptive Statistics
Descriptive statistics provide the description of a data which can be seen from the average value (mean), standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (inclination of distribution) (Ghozali, 2011). So, descriptive statistic will give explanation more of each variable in details.

3.8.2 Classical Assumption Tests
According to Santoso (2009), good regression model is model with minimal forecasting errors. There are classic assumptions that need to be fulfilled, such as:

3.8.2.1 Normality Test
Normality test aims to test whether the dependent variable and independent variable both have a normal distribution or not. Data normality test can be done qualitatively by using histogram graph and scatter plot; quantitatively by using Kolmogonov-Smirnov. Data is called normal if the histogram graph and scatter plot follow the curved line and
diagonal lines qualitatively, while data is called normally distributed if the probability or p (ASymp Sig) > 0.05 quantitatively (Wijaya, 2009).

3.8.2.2 Multicollinearity Test
Multicollinearity is to test whether in the regression model there is correlation. In general, if VIF is greater than 10 and Tolerance is greater than 0.1, then the variable has multicollinearity problem with other independent variables. Good regression model should not have correlation between independent variables (Wijaya, 2009).

3.8.2.3 Autocorrelation Test
Autocorrelation arises because sequential observations over time are related to each other. According to Kuncoro (2001), the decision whether or not autocorrelation as follows:

1. Detection positive autocorrelation:
   a. if d < dL then there is positive autocorrelation,
   b. if d > dU there is no positive autocorrelation,
   c. if dL < d < dU then the test is inconclusive.

2. Detection of negative autocorrelation:
   a. if (4 - d) < dL then there is negative autocorrelation,
   b. if (4 - d) > dU there is no negative autocorrelation,
   c. if dL < (4 - d) < dU then the test is inconclusive.

3.8.2.4 Heteroscedasticity Test
Heteroscedasticity aims to test whether in regression model, there is an inequality of variance from residues of one observation to another. Heteroscedasticity test can be done qualitatively using a special plot or quantitatively by using Gletjer. Qualitatively, the data is called homogeneous if the variance of the residue does not form a specific pattern while quantitatively, the data is called homogeneous if the probability or p (Asymp Sig) > 0.05 (Wijaya, 2009).
3.8.3 Multiple Regression Analysis

Multiple regression analysis is statistical technique used to analyze the influence of independent variables on dependent variable. Referring to the research model used, based on multiple regression analysis, the equation will as follow:

\[ Y = b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 \]

where:

\( Y \) = mutual fund performance
\( b_1 \) = Past Performance coefficient
\( X_1 \) = Past Performance
\( b_2 \) = Fund Age coefficient
\( X_2 \) = Fund Age
\( b_3 \) = Asset under Management coefficient
\( X_3 \) = Asset under Management
\( b_4 \) = Risk
\( X_4 \) = Risk coefficient

3.8.3.1 Adjusted Coefficient of Determination (Adjusted \( R^2 \))

It is used to measure how independent variables explain the dependent variable. The distance \( R^2 \) is 0 to 1. If \( R^2 \) is small and close to 0, it means the ability of independent variables in describing the dependent variable is very limited while if \( R^2 \) is large and close to 1, it means the ability of the independent variable to explain the dependent variable is very broad (Santoso, 2009).

3.8.3.2 Simultaneous Test (F-Test)

F test is used to compare the variance explained by regression to residue and the results tell whether the overall influence is statistically significant. Based on the comparison of probability values with the error level criteria (\( \alpha \)) is 0.05. If \( F_{\text{counted}} < F_{\text{table}} \) in the SPSS output, it means the independent variables have significant effect towards the dependent variable (Ghozali, 2011).
3.8.3.3 Partial Test (t-Test)

T test is used to compare the variance explained by regression to residue and the results tell whether the influence is statistically significant. Based on the comparison of probability values with the error level criteria (α) is 0.05. If P-value smaller than 0.05, then independent variables have a significant effect towards the dependent variable (Ghozali, 2011).
CHAPTER IV

DATA ANALYSIS

4.1 Descriptive Statistics Test

Table 4.1: Descriptive Statistics Test Results

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR</td>
<td>36</td>
<td>-5.26</td>
<td>22.02</td>
<td>2.1078</td>
<td>6.56110</td>
</tr>
<tr>
<td>PPSR</td>
<td>36</td>
<td>-4.56</td>
<td>1.62</td>
<td>-0.5378</td>
<td>1.46064</td>
</tr>
<tr>
<td>FA</td>
<td>36</td>
<td>2.00</td>
<td>4.00</td>
<td>3.0000</td>
<td>.82808</td>
</tr>
<tr>
<td>AUM</td>
<td>36</td>
<td>25.41</td>
<td>1416.49</td>
<td>375.2911</td>
<td>405.99867</td>
</tr>
<tr>
<td>RISK</td>
<td>36</td>
<td>.00</td>
<td>.31</td>
<td>.0936</td>
<td>.10343</td>
</tr>
<tr>
<td>Valid N</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS ver. 21, 2018

The number of sample is 12 fixed income mutual fund for three years period from 2015-2017, so the total number of observation is 36 samples. The result of descriptive statistics test above shows that the minimum value of Sharpe Ratio (SR) is -5.26 (at Batavia Dana Obligasi Sentosa 2017) and its maximum value is 22.02 (at Insight Scholarship Fund 2017). Sharpe Ratio (SR) has the average value of 2.1078, with a standard deviation of 6.56110.

The minimum value of Past Performance (PPSR) is -4.56 (at Bahana Provident Fund 2015), and its maximum value is 1.62 (at Mega Asset Mantap Plus 2015). The average value of Past Performance (PPSR) is -0.5378 with a standard deviation of 1.46064.

Fund Age (FA) has a minimum value of 2.00 with a maximum value of 4.00. The average value of Fund Age (FA) is 3.0000 with a standard deviation of 0.82808.

The minimum value of Asset under Management (AUM) is 25.41 (at Yuanta Fixed Income 2017) while its maximum value is 1416.49 (at PNM Dana Bertumbuh 2017).
Asset under Management (AUM) has the average value of 375.2911, with a standard deviation of 405.99867.

The minimum value of Risk is 0 while its maximum value 0.31. The average value of Risk is 0.936 with a standard deviation of 0.10343.

4.2 Classical Assumption Tests

4.2.1 Normality Test

Table 4.2: Normality Test Result

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>36</td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>0,0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>4,35566531</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>0,145</td>
</tr>
<tr>
<td>Positive</td>
<td>0,145</td>
</tr>
<tr>
<td>Negative</td>
<td>-0,144</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>0,868</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0,439</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

Source: SPSS ver. 21, 2018

Based on data from the table above, the significant value is 0.439 which is greater than 0.05, it can be concluded that the variable of Past Performance Sharpe Ratio, Sharpe Ratio, Fund Age, Asset under Management, and Risk are normally distributed. The writer conducts graphical analysis using normal probability plots in order to prove the data is normally distributed. The results can be seen on figure below.
Based on Figure 4.1, it can be seen that the point spreads around the diagonal line, then it can be concluded that the variable of Past Performance Sharpe Ratio, Fund Age, Asset under Management, and Risk are normally distributed.

4.2.2 Multicollinearity Test

Table 4.3: Multicollinearity Test Result

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PPSHARPE</td>
<td></td>
<td>.587</td>
<td>1.703</td>
</tr>
<tr>
<td>1</td>
<td>FA</td>
<td></td>
<td>.814</td>
<td>1.228</td>
</tr>
<tr>
<td></td>
<td>AUM</td>
<td></td>
<td>.895</td>
<td>1.117</td>
</tr>
<tr>
<td></td>
<td>RISK</td>
<td></td>
<td>.531</td>
<td>1.882</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SR

Source: SPSS ver. 21, 2018
Based on data from table 4.3 in the tolerance column, it can be seen that the tolerance value of all variables is greater than 0.1 while in the VIF column it can be seen that the VIF value of all variables is smaller than 10, it can be concluded the variable of Past Performance Sharpe Ratio (PPSR), Fund Age (FA), and Asset under Management (AUM), and Risk does not occur multicollinearity.

4.2.3 Autocorrelation Test

Table 4.4: Autocorrelation Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.748 (^a)</td>
<td>.559</td>
<td>.502</td>
<td>4.62815</td>
<td>1.560</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), RISK, AUM, FA, PPSHARPE

b. Dependent Variable: SR

Source: SPSS ver. 21, 2018

From table 4.4, it shows that the DW value is equal to 1.560 with the Sharpe Ratio method if the value of \(dU\) for the total sample is 36 with four independent variables is 1.513 so the value \(4 - dU\) is 2.487. So, the autocorrelation test result indicates \(dU < DW < 4 - dU\) which is 1.513 <1.560 <2.487 for this Sharpe Ratio Method indicates the Sharpe Ratio method do not have any problem of autocorrelation.
4.2.4 Heteroscedasticity Test

Figure 4.2: Heteroscedasticity Gletjer Test Result

The result of heteroscedasticity using Gletjer test, which can be seen from the figure above, shows that all dots are randomly distributed and did not form a specific pattern. Therefore, it can be concluded that there is no heteroscedasticity in this regression model.
4.3 Multiple Regression Analysis

Table 4.5: Multiple Regression Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-9,284</td>
<td>2,997</td>
<td>-</td>
<td>-3,098</td>
</tr>
<tr>
<td>PPSR</td>
<td>1,403</td>
<td>.699</td>
<td>.312</td>
<td>2,007</td>
</tr>
<tr>
<td>FA</td>
<td>3,626</td>
<td>1,047</td>
<td>.458</td>
<td>3,464</td>
</tr>
<tr>
<td>AUM</td>
<td>-.001</td>
<td>.002</td>
<td>-.059</td>
<td>-.465</td>
</tr>
<tr>
<td>RISK</td>
<td>17,331</td>
<td>10,375</td>
<td>.273</td>
<td>1,670</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SR

Source: SPSS ver. 21, 2018

The regression model that can be attained from Table 4.5 above is:

\[ Y = -9,284 + 1,403X_1 + 3,626X_2 - 0,001X_3 + 17,331X_4 \]

The equation can be implied as:

1. \( a = -9,284 \) represents the value of SR (Y) will decrease by 0.004% if PPSR, FA, AUM, and RISK are zero.

2. \( b_2 = 1,403 \) represents the value of SR (Y) will increase by 0.053% for every 1% increase in PPSR (\( X_1 \)), if other factors are fixed.

3. \( b_3 = 3,626 \) represents the value of SR (Y) will increase by 0.002% for every 1% increase in FA (\( X_2 \)), if other factors are fixed.

4. \( b_1 = -0,001 \) represents the value of SR (Y) will decrease by 0.645% for every 1% increase in AUM (\( X_3 \)), if other factors are fixed.

5. \( b_4 = 17,331 \) represents the value of SR (Y) will increase by 0.105% for every 1% increase in RISK (\( X_4 \)), if other factors are fixed.
4.3.1 Adjusted Coefficient of Determination \((R^2)\)

Table 4.6: Adjusted Coefficient of Determination Result

<table>
<thead>
<tr>
<th>Model Summary(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), PPSR, FA, AUM, RISK.
b. Dependent Variable: SR

Source: SPSS ver. 21, 2018

The value of adjusted \(R^2\) is 0.502, which means that the independent variables in this study, consist of Past Performance (PPSR), Fund Age (FA), Asset under Management (AUM), and Risk explain 50.2% of variance in the dependent variable which is Sharpe Ratio (SR). The remaining 49.8% will be explained by other variables that are not included in this study.

4.3.2 Simultaneous Test (F-Test)

Table 4.7: F-Test Result

<table>
<thead>
<tr>
<th>ANOVA(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SR
b. Predictors: (Constant), PPSR, FA, AUM, RISK.

Source: SPSS ver. 21, 2018

Table 4.7 shows that the value of \(F_{\text{counted}}\) is 9.835. Then, it could be known that the value of \(F_{\text{table}}\) at 0.05 significance level is 2.69 (k=4; df=36-4-1=31). Therefore, since the \(F_{\text{counted}}\) is bigger than the \(F_{\text{table}}\) (9.835 > 2.69), it can be concluded that Past
Performance (PPSR), Fund Age (FA), Asset under Management (AUM), and Risk simultaneously have significant effect to the SR.

4.3.3 Partial Test (t-Test)

Table 4.8: t-Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-9.284</td>
<td>2.997</td>
<td>-3.098</td>
<td>.004</td>
</tr>
<tr>
<td>PPSR</td>
<td>1.403</td>
<td>1.699</td>
<td>.312</td>
<td>2.007</td>
</tr>
<tr>
<td>FA</td>
<td>3.626</td>
<td>1.047</td>
<td>.458</td>
<td>3.464</td>
</tr>
<tr>
<td>AUM</td>
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a. Dependent Variable: SR

Source: SPSS ver. 21, 2018

The result of t-test as shown at Table 4.8 above shows that Past Performance (PPSR), Fund Age (FA), Asset under Management (AUM), and Risk have no significant impact on SR since the significance value of those variables are bigger than 0.05. However, FA has significant impact on SR because its significance value is smaller than 0.05. A more specific explanation is as follows below:

1. PPSR partially has an insignificant positive impact on SR since the t-value of PPSR is 2.007 and its significance level is 0.053. (Sig < α = 5%).
2. FA partially has a significant positive impact on SR since the t-value of FA is 3.464 and its significance level is 0.002. (Sig < α = 5%).
3. AUM partially has an insignificant negative impact on SR since the t-value of AUM is -0.465 and its significance level is 0.645. (Sig > α = 5%).
4. RISK partially has an insignificant positive impact on SR since the t-value of RISK is 0.105 and its significance level is 1.670. (Sig > α = 5%).
4.4 Discussions

4.4.1 The Effect of Past Performance on Sharpe Ratio
The result obtained from the multiple regression test shows that Past Performance (PPSR) has an insignificant positive impact on Sharpe Ratio (SR), consistent with the findings by Damayanti and Cintyawati (2015). The positive coefficient of Past Performance suggests that an increase in the value of Past Performance will result in an increase in the value of Sharpe Ratio, but the impact will not be significant. Therefore, according to Damayanti and Cintyawati (2015), the performance of previous mutual funds reflects the rate of return given by mutual funds to investors. This is very useful for investors to choose the right investment so that they can provide positive returns.

4.4.2 The Effect of Fund Age on Sharpe Ratio
The result of the multiple regression test indicates that Fund Age (FA) has a significant positive impact on Sharpe Ratio (SR). This is consistent with the results of research conducted by Damayanti and Cintyawati (2015). However, in this case, a longer fund age is more desirable. Investor are more likely to invest in long-traded mutual funds since mutual funds that have the longer age will have the longer track record and can provide investors with the better picture of mutual fund performance.

4.4.3 The Effect of Asset under Management on Sharpe Ratio
The research that has been done by Damayanti and Cintyawati (2015) is in line with the output of the multiple regression test shows that the impact of Asset under Management on Sharpe Ratio is insignificantly negative. This means that the negative coefficient of the Asset under Management means that a decrease in the value of Asset under Management might improve the Sharpe Ratio, but the impact will not be significant. However, it is a contrast with Chen (2004) that stated that asset under management size has a significant influence on the performance of mutual funds. This is caused by managed funds must be in accordance with the minimum limit to get returns from the funds spent on other costs and research costs. In addition, it is also said that funds that are too large will reduce or even produce negative marginal returns. Another thing is because the large funds can usually be used as a stimulus for mutual funds to maintain investor trust.
4.4.4 The Effect of Risk on Sharpe Ratio

By looking at the result of the multiple regression test, it could be known that the impact that Risk has on Sharpe Ratio is positive insignificantly. The positive coefficient of Risk suggests that an increase in the value of Risk will result in an increase in the value of Sharpe Ratio. This is similar with the result of the research conducted by See and Jusoh (2012). The positive coefficient of the Risk means that an increase in the value of Risk might improve the Sharpe Ratio, even though the effect is not significant. This is consistent with the theory which states the higher risk, the higher return will be rewarded to investor on their investment (Ginting, 2010).

4.4.5 The Effect of PPSR, FA, AUM, and RISK on SR

From Simultaneous Test (F-Test), it represent that Past Performance, Fund Age, Asset under Management, and Risk have a altogether effect towards the fixed income mutual fund performance. Moreover, the result from the Adjusted R Square is 0.502. The influence of 50.2% indicates that the variable of Past Performance, Fund Age, Asset under Management, and Risk have a weak effect on fixed income mutual fund performance. However, these variables are still valid to be an information which used as an indicator for the investors, so that they able to know what the factors that will affect the fixed income mutual fund performance.
CHAPTER V

CONCLUSION

5.1 Conclusion

The aim of the research is to analyze the influence of Past Performance, Fund Age, Asset under Management, and Risk towards the performance of fixed income mutual fund in Indonesia for the period of 2015-2017 that listed on Otoritas Jasa Keuangan (OJK). Multiple regression analysis is used to test the hypothesis, then the findings can be concluded as follows:

1. Past Performance has an insignificant positive effect on the performance of fixed income mutual fund. This means that an increase in the value of Past Performance does not guarantee an increase in the performance of fixed income mutual fund.

2. Fund Age has a significant positive effect on the performance of fixed income mutual fund. This means that an increase in the value of Fund Age will result in an increase in the performance of fixed income mutual fund.

3. Asset under Management has an insignificant negative effect on the performance of fixed income mutual fund. This means that a decrease in the value of Asset under Management does not guarantee an increase in the performance of fixed income mutual fund.

4. Risk has an insignificant positive effect on the performance of fixed income mutual fund. This means that an increase in the value of Risk does not guarantee an increase in the performance of fixed income mutual fund.

5. Past Performance, Fund Age, Asset under Management, and Risk altogether have significant effect on the performance of fixed income mutual fund. However, the explanatory power of these variables towards the performance of fixed income mutual fund is weak since the adjusted $R^2$ is only 50.2%.
5.2 Recommendations

5.2.1 For the Investors
This research is useful as an input in knowing what factors influence the performance of Fixed Income Mutual Funds in Indonesia in terms of Past Performance, Fund Age, and Asset under Management variables so that investors can take corrective steps to ensure that the investment return on fixed income mutual funds increases.

5.2.2 For the Companies
Fund size managed by a mutual fund cannot used as a reference to assess the performance of fixed income mutual funds but investment managers should give the prospectus and other relevant reports to investors. With the existence of a proper report, the information can be used as a guide for investors to assess the performance of fixed income mutual funds.

5.2.3 For Future Researchers
Further researchers can examine further the impact of Past Performance, Fund Age, Asset under Management, and Risk on the performance of fixed income mutual funds by considering including other variables that have not been discussed in this study. In addition, it would be better to consider using different research periods with this study to see the consistency of results research.
REFERENCES

Book


Journal


**Report**


**Website**


## APPENDIX 1

### RESEARCH DATA

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<tr>
<th>Tahun</th>
<th>Nama Reksadana</th>
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APPENDIX 2

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2. Advisers must keep a copy of this sheet for legality purposes.
3. Please multiply this sheet by yourself. Minimum 10 times of meeting.
4. Submit 4 Soft Cover Skripsi + 1 Book related to Management (No photo copy)
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3. Please multiply this sheet by yourself. Minimum 10 times of meeting.
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