

The Effects of Asset Under Management, Sharpe Ratio, Inflation and IHSG on the Performance of Stock Mutual Funds and Fixed-Income Funds for the Period 2012-2017

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ABSTRACT

This thesis examines the internal and external factors of return on mutual funds, fixed income mutual funds. The sample used is stock mutual funds and fixed income mutual funds listed on the Indonesia Stock Exchange and actively traded from January 2013 to December 2017. The number of mutual funds that meet the research criteria is 175 mutual funds. The form of data used in this study is panel data. The analytical tool used is a regression with the EViews 9.0 statistical program. The result shows the independent variable consisting of managed funds, Sharpe ratio, inflation, and IHSG jointly influence the dependent variable (stock return). Partially, managed funds, Sharpe ratio, inflation have a significant effect on stock mutual fund returns and return on fixed income mutual funds, but managed and inflation funds have a negative effect, while IHSG does not affect the return of stock mutual funds and return on fixed income funds.

Keywords: *Asset Under Management, Sharpe Ratio, Inflation, IHSG, Performance.*

1. INTRODUCTION

The growth of the mutual fund industry made a real contribution in supporting Indonesia's economic growth. This can be seen from the calculation of Gross Domestic Product (GDP) which is used as the basis for calculating economic growth. One component of economic growth is investment. Mutual funds provide the feel of an inclusive investment climate in supporting Indonesia's economic growth. The higher the managed fund of investment managers indicates increased investment that sustains Indonesia's economic development. Almost all types of mutual funds in Indonesia are developing quite well, especially the growth of equity funds which have a proportion of up to 33.61% of the total managed funds of all mutual funds. The proportion is also influenced by changes in economic fundamentals that lead to changes in the proportion of asset classes in the Investment Fund. In conditions of relatively low-interest rates, the tendency of investors to provide a greater proportion of investment in equity funds is to obtain higher investment returns but can occur otherwise.

Reference [1] outlines that the performance of mutual funds with a larger size of mutual funds will convince investors to provide better services and better portfolios so that investors' hopes of the funds allocated will generate high returns. In this case, the size of mutual funds has a positive effect on mutual funds' performance. [2] conducted a study to determine the relationship between the Expense ratio, turnover, the size of mutual funds, and cash flow to mutual funds' performance. In this study, the data used were 27 mutual funds from 2005 to 2007. 27 observed mutual funds consisted of 8 stock mutual funds, 9 fixed income mutual funds, and 12 mixed mutual funds. The test results showed that mutual fund size had a positive and significant effect on mutual fund performance.

Market efficiency shows that the expected risk and return rate are positively related, so the higher the risk, the higher the return rate. A study conducted by [3] used panels representing individual investors. When the previous month's return is positive, the investor is sure that the future return must be positive and the risk is

lower. The results show that the expected return and risk to be received are negatively related. Therefore, the Sharpe ratio changes based on the previously realized return. So in the study found that there is no relationship between the Sharpe ratio with stock returns.

Instead, in his research, [4] stated that there is a positive and significant relationship between the Sharpe ratio and return on mutual funds. The data used is obtained from the mutual fund bond issued in Taiwan with a sample period from January 2001 to 2010.

2. METHODS

The research object in this final work is mutual funds and fixed income mutual funds found in Indonesia. The data used in this study are the NAV data of the types of mutual funds and fixed income. The selected data are long-term data that began from January 2013 to December 2017. So the data from the types of mutual funds and fixed income mutual funds processed in the calculation are active traded mutual funds data for 60 months, then the data that is not actively traded in that period will not be included in the research object.

After separating from the types of stock mutual funds and fixed income mutual funds, which are active mutual funds traded and those that are not actively traded, data is obtained with the total number of mutual funds in Indonesia totaling 587 mutual funds.

The data analysis technique used in this study is multiple linear regression analysis. The stages of this analysis are descriptive statistics, classic assumption tests (normality test, multicollinearity test, and heteroscedasticity test), multiple linear regression analysis, coefficient of determination, F statistical test (model feasibility test), and statistical test t (hypothesis test).

Formula Returns obtained by investors from their investments follow (1).

$$R_{pt} = \frac{NAB_t - NAB_{t-1}}{NAB_{t-1}} \tag{1}$$

Reward to Variability (Sharpe Measure). William F. Sharpe introduced this measurement method in 1966. Sharpe Measure is a portfolio performance calculated by measuring returns more divided by the variability of portfolio returns. The greater the Sharpe Measure value shows the better performance of the portfolio follow (2).

$$\bar{s}_p = \frac{\bar{R}_p - R_f}{\sigma} \tag{2}$$

The JCI was introduced on April 1, 1983 (Kattopo, 1997). This index is the price movement of all ordinary shares and preferred shares listed on the IDX. The basic calculation of the JCI is as follows (3).

$$IHSG = \frac{\sum_{i=1}^N P_i Q_i}{ND} \times 100 \tag{3}$$

3. RESULTS AND DISCUSSION

3.1 Multiple Linear Regression Test

This analysis is done using eviews. The form of the regression model is carried out to determine the relationship of the influence of independent variables, namely Asset Under Management, Sharpe Index, Inflation, IHSG, on the independent variables return on stock mutual funds and fixed income mutual funds based on Table 1.

$$Y = a + b1X1 + b2X2 + b3X3 + b4X4 + e$$

Table 1. Asset Under Management, Sharpe Index, Inflation, IHSG, on the independent variables return on stock mutual funds and fixed income mutual funds

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	0.003893	0.002772	1.404429	0.1602
<i>ASSET</i>	-6.90E-16	1.40E-16	-4.914121	0.0000
<i>SHARPEINDEX</i>	0.021170	0.000161	131.5515	0.0000
<i>INFLATION</i>	-0.056802	0.012963	-4.381697	0.0000
<i>IHSG</i>	7.42E-07	4.45E-07	1.668699	0.0952
<i>R-squared</i>	0.640859	<i>Mean dependent var</i>		0.003923
<i>Adjusted R-squared</i>	0.640720	<i>S.D. dependent var</i>		0.030886
<i>S.E. of regression</i>	0.018513	<i>Akaike info criterion</i>		-5.140175
<i>Sum squared resid</i>	3.536743	<i>Schwarz criterion</i>		-5.136667
<i>Log-likelihood</i>	26538.58	<i>Hannan-Quinn criter.</i>		-5.138989
<i>F-statistic</i>	4603.361	<i>Durbin-Watson stat</i>		1.366271
<i>Prob(F-statistic)</i>	0.000000			

Based on testing the data using eviews, the results of the equation below are obtained:

$$Y = 0,003893 - 6.90E-16X1 + 0.021170X2 - 0.056802X3 + 7.42E-07X4 + e$$

Explanation of the above equation as follows:

1. Constant value of 0,003893, meaning that without independent asset variables, Sharpe Index, Inflation, JCI, mutual fund returns are 0,003893.
2. The regression coefficient X1 or asset variable is 6.90E-16, meaning that if the value of the asset variable increases by one unit, then the return value increases by 6.90E-16.
3. X2 regression coefficient or Sharpe index variable is 0.021170, meaning that if the value of the Sharpe index variable is one unit, then the return value increases by 2.117%.
4. X3 regression coefficient or inflation variable is 0.056802, meaning that if the inflation variable value rises by one unit, then the return value drops by 5.6802%.

- X4 regression coefficient or CSPI variable is 7.42E-07, meaning that if the JCI variable value rises by one unit, then the return value increases by 7.42E-07

3.1.1 Test t (Partial)

To determine whether or not a significant influence of the independent variables partially on an independent variable is used, the t-test.

3.1.2 Hypothesis:

H01: There is no significant effect of Asset on return

H11: There is a significant effect of Asset on return

H02: There is no significant effect of Sharpe index on return

H12: There is a significant effect of Sharpe index on return

H03: There is no significant effect of inflation on return

H13: There is a significant effect of inflation on return

H04: There is no significant effect of the CSPI on returns

H14: There is a significant effect of JCI on return

3.1.3 Test Criteria:

- If Sig < 0.05, then H0 is rejected
- If Sig > 0.05, then H0 is accepted

Table 2. Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	0.003893	0.002772	1.404429	0.1602
<i>ASSET</i>	-6.90E-16	1.40E-16	-4.914121	0.0000
<i>SHARPEINDEX</i>	0.021170	0.000161	131.5515	0.0000
<i>INFLATION</i>	-0.056802	0.012963	-4.381697	0.0000
<i>IHSG</i>	7.42E-07	4.45E-07	1.668699	0.0952

Based on the Table 2, the following results are obtained:

Asset Variables have a significance value of 0.0000. Because the sig value (0.0000) > 0.05, then H0 is rejected, meaning that there is a significant effect of Asset on return.

Variable Sharpe index has a significance value of 0.0000. Because the sig value is (0.0000) > 0.05, H0 is rejected, meaning there is a significant effect of the Sharpe index on return.

Inflation variable has a significance value of 0.0837. Because the sig value (0.0000) > 0.05, H0 is rejected, meaning that there is a significant effect of inflation on return.

The JCI variable has a significance value of 0.0952. Because the sig value (0.0952) > 0.05, H0 is accepted, meaning that there is no significant effect of the IHSG on return.

4. CONCLUSIONS

This research was conducted to determine the effect of managed funds (aum), sharpe index, inflation, and cspi on return on stock mutual funds and fixed income mutual funds. Return of stock mutual funds and fixed income mutual funds as the dependent variable and aum, sharpe ratio, inflation and ihsg as independent variables. The conclusions that can be taken in this study are as follows: asset under management shows that there is a significant effect on the return of a negative mutual fund, sharpe ratio shows that there is a significant effect on mutual fund returns, inflation shows that there is a significant effect on mutual fund returns but negative. Jci shows that there is no significant effect on mutual fund returns.

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