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Research Article

Evaluating the Impact of Inflation and Exchange Rates on the Net Active Value (NAV) of Conventional Mutual Funds in Indonesia

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Abstract.
The growing development in the financial industry and the current high inflation rate are a great worry for investment prospects, especially mutual funds. Conventional mutual funds in Indonesia have experienced significant growth in the capital market. In the last 10 years, the number of domestic mutual funds has continued to increase. One measure of investment performance in mutual funds is proxied by the Net Asset Value (NAV) of mutual funds. Therefore, the objective of this study is to evaluate the influence of macroeconomics variables on the NAV of conventional mutual funds in Indonesia. In this study, using commercial bank data in Indonesia, we estimate an empirical model of the effect of inflation and exchange rates on the NAV of conventional mutual funds in Indonesia during the period 2012–2022. We employ a time series model using the Ordinary Least Square (OLS). The main findings show that while inflation has no effect on the NAV of conventional mutual funds, the exchange rate has a significant effect on it because there are many instruments in conventional mutual funds that have invested abroad due to changes in exchange rates that appear with dominant results that do not affect the growth of the NAV of conventional mutual funds.

Keywords: macroeconomics, net active value (NAV), mutual funds

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1. Introduction

It is very profitable for us to invest in times that are full of convenience and many alternative choices. Stocks, deposits, bonds and so on are instruments in investing our funds. To gain profits in the next 5-10 years, it is very important to invest now [1]. There are many investment instruments circulating in the market. Investment instruments provide higher returns than other instruments traded on the stock [2]. Seeing also this activity is quite difficult to realize. Clients will face constraints and risks, risks arise if clients do not have knowledge and experience in investing in stock instruments that have encouragement and support for investing. That limitation, mutual fund products. The funds available to the people should be collected in mutual funds. According to Murni,

investment is the cost of buying capital or means of production to maintain or increase output in the future [3].

Clearly identifying the causes and effects is required by suppliers of funds and potential suppliers of funds or investors. Based on this data, it can be seen that the work process of each mutual fund is intended so that investors do not make mistakes. [4] states that inflation affects the value of mutual funds. Mild inflation considered positive for the pace of the economy will encourage people with the aim of increasing their wealth and investing their money more aggressively. [5] argues that the value of the Rupiah has a significant effect on the value of mutual funds. In an environment where the value of the rupiah decreases, the amount of debt that must be paid by corporations will increase, consequently investment will decrease. As a result, the company's performance decreases, this has an impact on the decline in the value of mutual fund assets which causes the NAV of conventional mutual funds to decrease. The first time I saw him, I was in third grade [6].

Inflation is defined as a general and sustained increase in the prices of goods or services. In this case, increases in the price of goods are not included in inflation unless the increase is endemic and unsustainable [7] The development of inflation is good news for Indonesia itself because if you look at the statistics from 2013 to 2021, inflation has fallen. According to statistics, the inflation rate in December 2013 was 8.38%, then 1.87% in December 2021, but increased again by 3% compared to the previous year, which was 5.51% at the end of 2022, what happened in Indonesia occurred due to the impact of stabilizing the value of fuel subsidies recorded in September 2022, the strength of inflationary pressure was too weak to be seen in the demand that occurred. In several increases on a monthly basis, it shows that inflation after the increase in the price of fuel has been resolved, which reflects to estimates that there is always a reduction in inflationary pressure and inflation itself can also be seen that its value is different below initial expectations [8]

Not only inflation, there are other things that also affect the macro economy, namely the exchange rate in the form of rupiah. [9] defines the process in the form of a nominal value of the currencies of various countries called the exchange rate. Therefore, the exchange rate can also be interpreted as the nominal value set in the process of buying and selling rupiah against currencies other than rupiah. The development of the rupiah exchange rate has increased from year to year, statistics note that in December 2020, the rupiah exchange rate against the US dollar was Rp. 12,579, then in December 2016 it became IDR 14,248 and at the end of 2022 the rupiah exchange rate reached IDR 15,821 [8]. With this background explanation, the aim of this research is to find out how

much influence inflation and the rupiah exchange rate have on the net asset value (NAV) of conventional mutual funds.

2. Literature Review

2.1. Mutual Fund

Mutual funds are a way of various choices in carrying out an existing investment for people with medium and small businesses. The reason is that the business is not tied to the amount of time and money spent on estimating the loss of its investment [10]. Mutual funds are designed to be a means of collecting finance from the community which has a modular nature, provides funding to carry out investments, but only has a limited amount of time and knowledge. Then, mutual funds carry out local research as their obligation to the Indonesian transportation system [11]

2.2. Net Asset Value

Basically, NAV is a nominal asset but cannot be controlled on the value of the liability with the amount divided into mutual fund units. According to this definition, NAV is a value in at least one unit in a mutual fund. A new funding offer referred to as a New Fund Offering (NFO) is issued by an asset management company as a new form of funding. NAV is also one of the many procedures that are always attempted, based on the NAV formula used when calculating the NAV, namely, net asset value = total assets - total liabilities [12]

There are several factors that influence the return on investment from traditional instruments, including equity, debt, high dominant capitalization, or even lower sectoral capitalization. The total amount of the original assets from the sales nominal for each type of ownership of an investment in the form of portfolio shares, bonds, deposits, and written statements of nominal market value, added with shares in the form of dividends and lottery bonds, then deducted by the implementation of mutual funds such as investment managers, port custodian banks, as well as others. Mutual funds are claimed as net assets if they have been deducted using a large number of the various portfolios [13]

2.3. Inflation

In the world of economics, inflation means a procedural increase in prices in general and is continuously related to market procedures which can be caused by various triggers, such as increased people's consumption, excess liquidity appearing in market procedures which triggers speculation or consumption, including the consequences process that is not smooth in the distribution of goods [7].

Using other words, inflation can be interpreted as an activity of decreasing exchange rates in the form of money without stopping. The price of goods and services is getting higher due to rising inflation which then causes a decrease in a company's profits. From this incident there was a reduction from the gain which was shared with a supplier of funds, thus an investment labeled as something with a lost interest could not share profits as expected. Then the value of shares also decreased followed by a decrease in net asset value (NAV) [14]

2.4. Exchange rates

Sadono [9] said that the rupiah exchange rate (KURS) means the value of a country's currency with other countries, the exchange rate is a macroeconomic variable that also influences the validity of stock prices. This is caused because the value of an unstable exchange rate is claimed to have an impact on the company in terms of production factors.

In the economic sector in Indonesia, a decreasing exchange rate does not always have bad consequences. The rupiah exchange rate which continues to fluctuate greatly has an impact on the Indonesian economy, both positively and negatively. The negative consequence is that if there is a decrease in the exchange rate, the production cost will increase and the debt from the company will also increase, so that the results provided are not the same as before, this causes an investment that will no longer be attractive to an investor, as a result it reduces the price of the investment made. impact on the Net Asset Value (NAV) of a mutual fund [5] Based on the previous explanation, the hypothesis as follows:

Hypothesis 1: There is a relationship between Inflation and Net Asset Value (NAV) of Conventional Mutual Funds.

Hypothesis 2: There is a relationship between the Rupiah Exchange Rates and Net Asset Value (NAV) of Conventional Mutual Funds.

Hypothesis 3: There is a relationship between Inflation, the Rupiah Exchange Rate sand Net Asset Value (NAV) of Conventional Mutual Funds.

3. Research Methods

3.1. Types of research

This study uses a quantitative approach, namely research with sources obtained from research results and data analysis. In this case the author uses a quantitative approach because the data used is in the form of figures published by Bank Indonesia (BI), the Financial Services Authority (OJK) and the Central Bureau of Statistics (BPS). [15]

3.2. Research of research

This study has two variables, namely the independent variable and the dependent variable, as follows:

1. Independent variables: Inflation (X1) and Rupiah Exchange Rates (X2).

2. Dependent variable: Net Asset Value (NAV) of Conventional Mutual Funds (Y).

3.3. Samples and Data

In the research carried out, reference data sources of all types used time series data as well as references through secondary data with data and information on actions by related parties such as written materials that support this research, based on time series reference information for the period 2012-2022. The secondary data was obtained from the Central Statistics Agency (BPS), Bank Indonesia and the Financial Services Authority (OJK). Data on inflation was obtained from the Web of Bank Indonesia, data on Rupiah Exchange Rates from the Central Bureau of Statistics (BPS), data on Net Asset Value (NAV) of Conventional Mutual Funds through Bank Indonesia (BI).[16]

3.4. Analysis Technique

The analysis technique used is Multiple Linear Regression Analysis Multiple linear regression analysis is an analysis used to determine the influence of the independent

variables on the dependent variable. The Multiple Regression Model equation used in this study is:

$$Y = a + Q1X1 + Q2X2 + \in i$$

Explanation:

Y = Net Active Value (NAV) of Conventional Mutual Funds

α = Constant

β1 = Regression Coefficient X1

β2 = Regression Coefficient X2

X1 = Inflation

X2 = Exchange Rates

E = Error terms

Results and Discussion

3.5. Data Collection

This study used a purposive sampling method so that there were limitations to the sample used. Data obtained from BPS and World Bank samples that met the sampling criteria for Indonesia were (33), inflation was (11), exchange rate was (11), and NAV was (11). The estimation results from time series data regression analysis are shown in table.[17]

TABLE 1:

Variabel	Coeffiecient	Std. Error	Prob.
C	11.796	0.8712	0.0000
Inflation	-0.2443	0.1566	0.1627
Exchange Rates	0.00027	5.5305	0.0018

3.6. Hypothesis Testing and Discussion

3.6.1. Effect of Inflation on Net Asset Value (NAV) of Conventional Mutual Funds

Based on the results of data analysis obtained at Inflation Prob value > 0.05 is 0.1627. H0 is rejected and this variable has no significant effect on the Net Asset Value of Conventional Mutual Funds. Through the results of the estimates carried out, it can be

seen that the phenomenon of inflation has no significant effect on the Net Asset Value (NAV) of conventional mutual funds in 2012-2022. The course of inflation in 2012-2022 which tends to decrease results in people tending to make money in the productive sector. As stated by Muhammad [18], the phenomenon of inflation that occurs especially at high rates makes the people very inclined to spend their finances on non-primary sectors and on goods with high prices, as a result, investment is increasingly directed towards non-productive scope which is classified as eliminating assets.

Supports the research studies carried out from [12] the conclusion that inflation has a negative impact on the Net Asset Value (NAV) of conventional mutual funds. The appearance of the impact in previous studies caused the inflation conditions in the tabulations used to be grouped in the non-severe category. Moderate inflation rates can serve as a stimulus for economic development because it makes people enthusiastic about pursuing targets, setting aside money and investing it.

3.6.2. Effect of the Rupiah Exchange Rate (KURS) on Net Asset Value (NAV) of Conventional Mutual Funds

Based on the results of data analysis obtained at the Rupiah Exchange Rates, the Proba value <0.05, namely 0.0018, then H0 is accepted. The variable has no significant effect on the Net Asset Value of Conventional Mutual Funds. In accordance with what is predicted to show that the rupiah exchange rate has an influence on the Net Asset Value (NAV) of conventional mutual funds in 2012-2022. These results are supported by a research study conducted on Priyandini [12] to obtain a conclusion that the rupiah exchange rate has a positive return on the Net Asset Value (NAV) of conventional mutual funds. This is also reinforced by using many instruments in conventional mutual funds that have an investment abroad as a result of changes in exchange rates appearing with dominant results not affecting the growth of the net asset value (NAV) of conventional mutual funds.

3.6.3. Effect of Inflation on the Net Asset Value (NAV) of Conventional Mutual Funds

Based on the F-test, simultaneously this study provides a conclusion that (all variables combined) the effect of inflation and the rupiah exchange rate can be ignored on conventional mutual funds. This result is likely due to the rupiah exchange rate, which does not have a significant impact on the NAV of conventional mutual funds to a certain

extent. This achievement is not in line with previous research with the conclusion that inflation and the rupiah exchange rate have an aggregate (simultaneous) consistent effect on the NAV of conventional mutual funds. In addition, there are still many studies that do not match the results of this study. It was concluded in this study that inflation and the rupiah exchange rate simultaneously (overall) have a consistent effect on the NAV of conventional mutual funds. The difference between the number of independent variables and the difference in period data acquisition can be reduced by the difference in gain.

4. Finding and Conclusion

From the acquisition of the analysis as well as the discussion from the chapter above, A conclusion can be obtained, namely:

1. Inflation partially has no significant effect on the net asset value of conventional mutual funds in Indonesia.

2. The rupiah exchange rates partially has a significant effect on the net asset value of conventional mutual funds in Indonesia.

3. Inflation and the rupiah exchange rates simultaneously have irrelevant effects on the net asset value of conventional mutual funds in Indonesia.

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