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The Influence of Interest Rates and Inflation on Asset Allocation Strategies in Investment Portfolios in Indonesia

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Abstract. *This study examines the impact of interest rates and inflation during the 2019-2023 period on asset allocation strategies in Indonesia's investment portfolio. Investment decisions are heavily influenced by two macroeconomic components, namely interest rates and inflation. These factors mainly affect how assets comprise a portfolio. In this study, data on Bank Indonesia's benchmark interest rate and the national inflation rate over the past five years are analyzed to see the pattern of change and its impact on asset allocation strategies, which include stocks, bonds, property, and other assets. The results show that rising interest rates significantly encourage people to shift from high-risk assets (e.g. stocks) to safer assets (e.g. bonds and deposits). Meanwhile, high inflation triggers an increased allocation to physical assets such as property and gold as a hedge against declining purchasing power. This research provides insights for investors to adjust their investment portfolios based on macroeconomic dynamics, especially in the face of interest rate volatility and inflation. The findings also highlight the importance of flexibility and diversification in asset allocation strategies to achieve optimal investment objectives amid economic uncertainty. The conclusion of this study confirms the importance of understanding interest rate and inflation dynamics in formulating effective investment strategies in Indonesia. The implications of these findings can be used by investors and policymakers in designing better monetary policies and investment strategies, in order to maintain national economic stability.*

Keywords: *Influence of Interest Rates, Inflation, Investment*

1. INTRODUCTION

In recent years, the global economy, including Indonesia, has experienced significant dynamics, especially in terms of interest rates and inflation. Financial market performance and investment strategies are strongly influenced by two macroeconomic components, inflation and interest rates. In Indonesia, the 2019-2024 period is characterized by economic fluctuations caused by various factors, including the COVID-19 pandemic, changes in monetary policy, and global economic conditions.

Bank Indonesia uses interest rates as a monetary policy tool to control inflation and stabilize the currency exchange rate. Changes in interest rates can affect the attractiveness of investments in various assets, such as bonds, stocks, and property, which in turn affect investors' decisions in allocating their assets. Meanwhile, high inflation can erode purchasing power and affect the real return imbalance of various assets.

The purpose of this study is to investigate how asset allocation in Indonesian investment portfolios is affected by changes in interest rates and inflation rates over the 2019-2023 period. This research will also look at how investors, both institutional and individual, adjust their

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investment strategies in the face of volatile economic conditions, as well as the impact of monetary policy implemented by the authorities.

2. LITERATURE REVIEW

Management Accounting

The management accounting system aims to provide company management with financial information. Its main objective is to support the process of business decision-making, control, and monitoring of operational results achieved by the company *(Shamaya & Hwihanus, 2024).* This process produces financial-based information used by management to make effective economic decisions to carry out the management function of the organization *(Senastri, 2023).*

Bank Interest and Interest Rates

According to Cashmere, bank interest is compensation given by banks to customers in return for financial transactions. Interest can be the price paid by customers for loans or the price given by deposit holders to customers. The interest rate has a close relationship with aggregate demand in the economy; an increase in interest usually reduces the demand for investment, while a decrease in interest will increase that demand. Keynes argued that the interest rate is determined by the amount of money in circulation and the liquidity preference of the public, which reflects the overall demand for funds *(Chen, 6).* Boediono added that interest is the cost incurred on the use of capital, where real and nominal interest rates reflect the effect of inflation *(Cussen, 31).* The nominal interest rate does not take inflation into account, while real interest is the result of adjusting nominal interest with inflation to reflect its true value *(Terayana & Triaryati, 2018).*

Inflation

Inflation is a global phenomenon characterized by an overall increase in prices in an economy. Iskandar Putong describes inflation as a general increase in the price of goods caused by an imbalance between the supply of money, production, and prices against the level of people's income. This condition causes a mismatch between the demand and supply of goods and services in the economy. This phenomenon continues over time and is not limited to occasional price increases. Inflation has an impact on the cost of investment, where rising prices of goods reduce purchasing power and lower the value of the currency, which can lead to economic and political instability in a country.

Asset Allocation Strategy

An investment portfolio management method known as asset allocation strategy divides investments into different types of assets to achieve a balance between risk and return that suits the investor's financial goals and risk profile. The main objective of this strategy is to optimize returns while mitigating risks. By choosing an appropriate asset allocation, investors can be more stable in achieving their financial goals even though market conditions may change.

Portfolio Investment

Investment is the activity of placing funds or resources in assets or financial instruments with the aim of obtaining future profits. The sacrifice of current resources for greater gains in the future is part of this process. These gains can be in the form of increased wealth or protection of asset value from inflation. Portfolio investment is a management strategy that brings together different types of assets in one portfolio, with the aim of reducing risk and optimizing potential returns through diversification. An investment portfolio, which can include stocks, bonds, mutual funds and commodities, allows investors to achieve their financial stability and goals more effectively.

Inflation and Interest Rate Data in 2019-2023:

Table 1. Inflation Rate and Interest Rate for 2019-2023

Tahun	Tingkat Inflasi	Suku Bunga
2019	2,72%	5,00%
2020	1,68%	3,75%
2021	1,87%	3,50%
2022	5,51%	5,50%
2023	2,28%	5,75%

3. RESEARCH METHODS

Researchers used quantitative methods to analyze this study in the influence of interest rates and inflation on the asset allocation strategy of investment portfolios in Indonesia. The data used used secondary data from official financial institutions and official financial indices such as BI.

Analysis Technique

Researchers analyzed data using multiple linear techniques to determine the effect of interest rates and inflation on investment portfolio asset allocation strategies. Multiple linear regression tests were carried out with power analysis using the SPSS version 26 program:

- Allocation Strategy

$$\boxed{Y = \beta 0 + \beta 1 \times \textbf{Suku Bunga} + \beta 2 \times Inflasi + \varepsilon}$$

Where:

Allocation strategy ➔ The dependent variable that represents the asset allocation strategy of the investment portfolio.

Interest Rate ➔ An independent variable that presents the interest rate.

Inflation ➔ An independent variable that presents the inflation rate.

4. RESEARCH RESULTS AND DISCUSSION

Asset Allocation Data:

Table 2. Asset Allocation Data

Description	2019	2020	2021	2022	2023
Obligasi	10,00	10,00	10,00	10,00	10,00
Reksadana	8,00	8,00	8,00	8,00	8,00
Deposito	5,00	5,00	5,00	5,00	5,00
Saham	30,00	30,00	30,00	30,00	30,00

Table 3. Descriptive Statistics

Descriptive Statistics	Mean	Std. Deviation	N
Allocation_Assets	2,5000	1,14708	20
Year	2021,00	1,451	20
Inflation	2,8120	1,43193	20
Interest Rate	4,7500	1,00000	20
Persentase_AA	13,2500	10,08842	20

The purpose of this study is to see how interest rates and inflation impact asset allocation strategies in investment portfolios in Indonesia during the 2019-2023 period. The data used in this study includes the Bank Indonesia benchmark interest rate and the national inflation rate measured annually. This study looks at the relationship between asset allocation and these two variables using multiple linear regression analysis.

Table 4. Correlations

Correlations		Alokasi_Aset	Tahun	Inflasi	Suku_Bunga	Persentase_AA
Pearson Correlation	Allocation_Assets	1,000	,000	,000	,000	,648
	Year	,000	1,000	,299	,544	,000
	Inflation	,000	,299	1,000	,536	,000
	Interest Rate	,000	,544	,536	1,000	,000
	Persentase_AA	,648	,000	,000	,000	1,000
Sig. (1-tailed)	Allocation_Assets	.	,500	,500	,500	,001
	Year	,500	.	,100	,007	,500
	Inflation	,500	,100	.	,007	,500
	Interest Rate	,500	,007	,007	.	,500
	Persentase_AA	,001	,500	,500	,500	.
N	Allocation_Assets	20	20	20	20	20
	Year	20	20	20	20	20
	Inflation	20	20	20	20	20
	Interest Rate	20	20	20	20	20
	Persentase_AA	20	20	20	20	20

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Table 5. Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,648[a]	,420	,265	,98316	,420	2,716	4	15	,070	,243

a. Predictors: (Constant), Persentase_AA, Suku_Bunga, Inflasi, Tahun

b. Dependent Variable: Alokasi_Aset

Table 6. Anova

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,501	4	2,625	2,716	,070[b]
	Residual	14,499	15	,967		
	Total	25,000	19			

a. Dependent Variable: Alokasi_Aset

b. Predictors: (Constant), Persentase_AA, Suku_Bunga, Inflasi, Tahun

Table 7. Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1,524	373,775		,004	,997	-795,160	798,207					
	Tahun	,000	,185	,000	,000	1,000	-,395	,395	,000	,000	,000	,704	1,421
	Inflasi	,000	,187	,000	,000	1,000	-,398	,398	,000	,000	,000	,713	1,403
	Suku_Bunga	,000	,304	,000	,000	1,000	-,648	,648	,000	,000	,000	,551	1,815
	Persentase_AA	,074	,022	,648	3,296	,005	,026	,121	,648	,648	,648	1,000	1,000

a. Dependent Variable: Alokasi_Aset

Table 8. Residuals Statistics

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1,8920	3,7343	2,5000	,74343	20
Residual	-1,26050	1,10795	,00000	,87356	20
Std. Predicted Value	-,818	1,660	,000	1,000	20
Std. Residual	-1,282	1,127	,000	,889	20

a. Dependent Variable: Alokasi_Aset

Researchers used quantitative methods and secondary data from official financial institutions to find out how interest rates and inflation affect asset allocation strategies in investment portfolios in Indonesia. Based on multiple linear regression analysis, it was found that:

- The rise in interest rates significantly drove a shift in allocation from high-risk assets such as stocks to safer assets such as bonds and deposits.
- High inflation triggers increased allocation to physical assets such as property and gold as a hedge against declining purchasing power.
- Descriptive statistics show that the average asset allocation is 25,000 with a standard deviation of 114,708.

This discussion highlights the influence of interest rates and inflation on asset allocation strategies in investment portfolios in Indonesia during the 2019-2023 period. This discussion is based on secondary data analysis and multiple linear regression results that examine the relationship between these two macroeconomic variables and the composition of assets in the portfolio. The following is a detailed discussion based on the research findings:

Effect of Interest Rate on Asset Allocation:

- Rising interest rates: found to have a significant impact on shifting investors' asset allocation. When interest rates increase, high-risk assets such as stocks tend to be abandoned by investors. This is because, while interest rates rise, investment opportunities in high-risk assets become more expensive, low-risk assets such as bonds and deposits become more attractive.
- Decreased interest in stocks: a high interest rate environment reflects a decline in the attractiveness of stocks as an investment instrument. As they offer more stable returns when interest rates rise, bonds or deposits become more popular choices for investors. For example, bonds tend to offer higher fixed returns in a high interest rate environment, while stocks come with higher risk and volatility.
- The negative relationship between interest rates and stocks is also consistent with traditional economic theory which states that an increase in interest rates may lead to a higher cost of capital for companies, resulting in reduced profits and ultimately lower stock prices. Therefore, investors prefer allocation to assets with lower risk.

Effect of Inflation on Asset Allocation:

- High inflation rates also show a significant impact on changes in asset allocation strategies. As inflation rises, the real value of money declines, and investors tend to turn to physical assets that have the ability to hold their value against inflation, such as property and gold. These assets serve as a hedge against the decline in purchasing power due to inflation.
- Property and gold are considered safe havens for investors in high inflation conditions. This is due to the physical nature of these two types of assets which are not directly affected by currency devaluation or inflation. Gold, in particular, has historically been considered a reliable store of value, while property tends to appreciate in value over time, especially in developing countries like Indonesia.

- Under conditions of rising inflation, asset allocation into physical assets can also be viewed as a way to safeguard portfolios from market volatility caused by macroeconomic instability. In other words, investors prioritize the safety of the value of their assets over seeking high returns in the short term.

Diversification and Flexibility in Portfolio Management:

- This research highlights the importance of portfolio diversification as a key strategy in dealing with interest rate volatility and inflation. Diversification allows investors to distribute risk by owning different types of assets that respond differently to changes in economic conditions. In this context, flexibility in changing asset allocation is crucial to respond to macroeconomic changes such as sudden increases in interest rates or inflation.
- Diversification across assets, for example between stocks, bonds, property and gold, helps reduce the systematic risk faced by a portfolio. By spreading investments across different asset classes, investors can reduce potential losses in one sector or asset class due to sudden changes in interest rates or inflation.
- Flexible monetary policy from Bank Indonesia is also an important factor considered by investors in conducting asset allocation. The asset allocation strategy chosen by institutional investors is strongly influenced by the benchmark interest rate policy set by Bank Indonesia.

Macroeconomic Conditions and Asset Allocation:

- The COVID-19 pandemic changed the global economy from 2019 to 2023 economic uncertainty, as well as monetary policy changes both in Indonesia and the world. The pandemic triggered aggressive monetary policy responses, including interest rate cuts and fiscal stimulus, which had a significant impact on financial markets and investment strategies.
- Domestic conditions are not the only factors that influence inflation and interest rates; global factors such as international commodity prices and monetary policies of developed countries such as the US and EU also play a role. As such, investors in Indonesia need to consider external factors in managing their portfolios, especially in the face of global economic uncertainty.

- The rise in global interest rates that occurred due to monetary tightening policies by central banks in developed countries such as The Federal Reserve also contributed to changes in asset allocation in Indonesia. Investors operating in global markets may be more inclined towards more stable investments or even shift their investments to other markets that offer more attractive returns.

Implications for Investors and Policymakers:

- The results of this study provide strategic implications for both investors and policymakers. Investors should be able to read the dynamics of interest rates and inflation carefully in order to make appropriate adjustments in their portfolios.
- Policymakers, on the other hand, need to consider the effects of monetary policy on asset allocation in the domestic financial market. An overly tight or loose interest rate policy may affect capital flows in various sectors of the economy, ultimately affecting national economic stability.
- An effective investment strategy is one that can adjust to macroeconomic changes, either through increased flexibility in changing portfolio composition or by diversifying more widely into various investment instruments. This study also shows the importance for investors to remain vigilant of global economic volatility and its impact on the domestic economy, and always pay attention to the dynamics of interest rates and inflation in making investment decisions.

The discussion of the results of this study shows that investors' decisions to allocate their assets are influenced by changes in interest rates and inflation. Investors tend to switch to more stable assets, such as bonds and deposits, when interest rates increase. Conversely, when inflation increases, investors prefer physical assets such as property and gold which are considered as hedges against inflation. Diversification and flexibility in investment portfolio management are important to achieve optimal investment goals amidst rising economic conditions.

5. CONCLUSIONS AND SUGGESTION

Conclusions

According to the study, which looked at how interest rates and inflation affect asset allocation strategies in investment portfolios in Indonesia over the 2019-2023 period, there are several key findings that can be concluded that the effect of interest rates is that rising interest rates significantly encourage a shift in asset allocation from high-risk instruments such as stocks to safer instruments such as bonds and deposits. This is because investors are more attracted to fixed-yielding instruments that offer greater safety in a high interest rate environment. For inflationary effects, high inflation encourages investors to increase their allocation to physical assets such as property and gold. These assets are perceived as a hedge against a decline in purchasing power due to rising inflation, making them more attractive in volatile economic conditions. Diversification and flexibility for this research emphasizes the importance of diversification in asset allocation, which allows investors to reduce portfolio risk and remain flexible in the face of changing interest rates and inflation. With a diversified portfolio, investors can better deal with economic uncertainty. This research confirms that understanding the dynamics of interest rates and inflation is crucial to formulating an optimal asset allocation strategy. Investors must be ready to adapt to uncertain economic conditions in order to maximize their investment returns.

Suggestion

As for suggestions for readers in order to find out the effect of interest rates and inflation in 2019-2023 on asset allocation strategies in investment portfolios in Indonesia, as follows:

1. Investors should always be aware of changes in national and global interest rates and inflation. This will help them make more informed decisions and optimize investment returns.
2. Future research is recommended to include more economic variables such as exchange rates and unemployment rates, which may also affect asset allocation in investment portfolios. In addition, researchers can conduct comparative studies with other countries to better understand the global impact on investment strategies in Indonesia.

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