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How The Macroeconomics Variables Influence to Net Asset Value (NAV) Growth of Sharia Mutual Funds in Indonesia?

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ABSTRACT

The macroeconomic indicators play an essential role in expanding the Islamic capital market sector in Indonesia, particularly Islamic mutual funds, furthermore monetary stability in the domestic economy will affect the increase in people who invest their funds in Islamic mutual funds instruments. Net asset value (NAV) is one of the indicators used in measuring the performance of a mutual fund, based on data on the net asset value of Sharia mutual funds in Indonesia in the last two years, it has decreased until the new normal era. This research aims to determine how macroeconomic indicators affect the net asset value of Sharia mutual funds partially and simultaneously in Indonesia from January 2017 to October 2022. Monthly data over the 2017-2022 period were analyzed using the Linear Ordinary Least Squares (OLS) regression method, with inflation, BI Rate 7 days repo, money supply, exchange rate, and index of ISSI (Indonesia Sharia Stock Index) as independent variables, and net asset value of Sharia mutual funds as the dependent variable. According to the study's findings, this research shows that partially, money supply, exchange rate, and index of ISSI significantly influence the net asset value of Islamic mutual funds in Indonesia, on the other hand, the inflation and BI rate had insignificant effect on the net asset value of Islamic mutual funds. Simultaneously, all exogenous variables affect the net asset value of Islamic Mutual Funds in Indonesia.

Keywords: *Inflation, BI Rate, Money Supply, Exchange Rate, Index of ISSI, Net Asset Value, Sharia Mutual Funds*

INTRODUCTION

The condition of the Covid-19 Pandemic which has begun to improve has had an impact on Indonesia's economic growth. This is indicated by an increase in community activities and business operations, resulting in a significant increase in demand for the goods and services sector. The Islamic financial services industry has also experienced positive growth with Indonesian Islamic financial assets able to grow well during the Covid-10 pandemic and the recovery period (new normal). Indonesia is one of the countries with a strong presence for the Islamic finance industry, marked by the Indonesian Islamic financial sector such as Islamic banking, Islamic insurance, Islamic bonds and mutual funds, which are ranked in the top ten in the world in terms of total assets (OJK, 2021).

The Indonesian Sharia Financial Services Sector consists of 3 sub-sectors namely, Islamic Banking, Islamic Non-Bank Financial Industry (IKNB) (consisting of Insurance, Financing Companies, Other Islamic Non-Bank Institutions), and Islamic Capital Markets (consisting of State Sukuk, Corporate Sukuk, and Sharia Mutual Funds). Based on OJK data (2021), the development of the Islamic capital market in terms of products and value during 2021 shows quite positive growth. On 30 December 2021, the Indonesian Sharia Stock Index (ISSI) increased by 6.50% compared to the ISSI index on 30 December 2020. The increase in the index was in line with the ISSI market capitalization value which grew positively by 19.10% to IDR 3,983.65 trillion. This increase is in line with the growth of the JCI at the end of 2021. The number of sharia shares included in the Sharia Securities List at the end of 2021 has reached 495 shares. In addition to sharia shares, the outstanding value of corporate sukuk through public offerings and the value of state bonds has increased.

On the other hand, the total Net Asset Value (NAV) of sharia mutual funds decreased in 2021 by 40.83% compared to 2020, with a total NAV as of December 30 2021 of IDR 44.00 trillion. This decrease occurred as a result of the implementation of the Job Creation Law which excluded BPKH investments from tax objects. Therefore, BPKH, which initially invested in Islamic mutual funds that had SBSN underlying, changed to investing directly in SBSN.

In Figure 1, based on the type, it can be seen that money market Islamic mutual funds have the largest number compared to other types of mutual funds, namely 65 RDS, followed by protected Islamic funds with 60 RDS and equity Islamic mutual funds with 59 RDS. The sharia mutual funds that have the largest proportion in terms of NAV at the end of 2021 are Foreign Securities-based Sharia Mutual Funds of 44.17%, followed by Money Market Sharia Mutual Funds of 18.12%, and Equity Sharia Mutual Funds of 14.02%. In 2021 there are 28 effective sharia mutual funds that have been issued and 27 sharia mutual funds that have been dissolved.



Figure 1. Number of Sharia Mutual Funds per Type and Proportion of NAV in 2021

Source: LPKSI 2021 (OJK, 2021)

Figure 2 shows the development of the net asset value (NAV) and the number of sharia mutual funds which have increased from 2018 to 2020, and decreased from 2020 to 2022. At the position of December 2022, the net asset value of sharia mutual funds reached Rp. 40.61 trillion, a decrease of 73.8% compared to December 2020. As for the number of Sharia Mutual Funds as of December 2021, there were 274 RDS, a decrease compared to December 2020, which had 289 RDS.

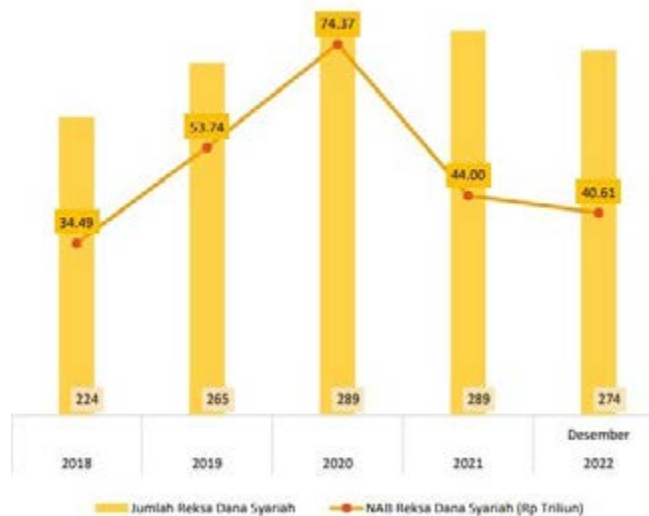


Figure 2. Development of Total Sharia Mutual Funds and Asset Value (NAV)

Source: RDS Statistics December 2022 (OJK, 2022)

Domestic macroeconomic stability is indispensable for the condition of securities instruments in the Indonesian Islamic capital market. The condition of the Covid-19 pandemic throughout the world has affected global economic conditions. In line with the global economy contracting due to the pandemic, Indonesia’s economy in 2020 also experienced a contraction.

Table 1 below shows the average values of macroeconomic indicators from 2017 to 2022 (positions until October 2022). Inflation data shows a decrease during the Covid Pandemic from 2019 to 2021,

but in 2022 it will increase. The condition of the BI rate interest rate shows a decline. The money supply shows an increase every year. The USD exchange rate against the Rupiah shows that the Rupiah will depreciate in 2022. The ISSI index value has decreased during the Covid 19 period in 2020, on the other hand the NAV of Islamic Mutual Funds has actually increased. The NAV of Islamic Mutual Funds then decreased in 2021-2022, but the ISSI index experienced an increase in that period.

Table 1. Macroeconomic Indicators and Net Asset Value (NAV)
Sharia Mutual Funds 2017-2022

Indicator	2017	2018	2019	2020	2021	October 2022
Inflation (%)	3.61	3.13	2.72	1.68	0.92	2,725
BI rate (%)	4.56	5.10	5.63	4.25	3.53	3.73
Circulating Money (billion IDR)	5,163,213	5,518,337	5,902,206	6,520,383	7,074,399	7,873,322
USD Exchange Rate (IDR)	13,398	14,267	14.131	14,625	14,353	14,753
ISSI Index	182,623	181,478	188,111	152,937	179,177	202,529
NAV RDS (billion Rp)	19,920.00	32,043.28	44,395.43	64,103.29	53,153.10	42,156.01

Source: OJK, IDX, BPS (Data processed)

The growth of Islamic capital market products in the form of Islamic stocks, corporate sukuk and state sukuk has increased every year on average and shows conditions of resilience during the Covid 19 Pandemic. On the other hand, the growth in the number of Islamic mutual funds has slowed and the net asset value of Islamic mutual funds has decreased in the last two years. This raises a question to be analyzed, how is the influence of macroeconomic factors on the growth of the net asset value of Sharia Mutual Funds, and what macroeconomic factors have the most influence on the growth of the net asset value of Sharia Mutual Funds? The macroeconomic factors that will be analyzed and are estimated to have an effect on the growth in the value of corporate sukuk are the inflation factor, the BI Rate, the amount of money in circulation, the USD exchange rate, and the ISSI index during the period before and after the Covid-19 Pandemic.

Investment is expenditure or expenditure from investors or companies to purchase capital goods and production equipment, to increase the ability to carry out the production process of goods and services available in economic activity (Sukirno, 1997). Islam strongly recommends investment as a means for humans to make their assets productive, and not just stored or stockpiled. Investment is a form of human endeavor not to leave their offspring in a weak condition (QS. An-Nisa: 9) as well as a form muamalah activities in order to help others carry out productive businesses, especially for those who are less well off in terms of capital (Pardiansyah, 2017). But the investment activities carried out must not conflict with Islamic principles.

According to DSN MUI Fatwa No. 20/DSN-MUI/IV/2001 concerning investment implementation guidelines for sharia mutual funds, defines sharia mutual funds as mutual funds that operate according to Islamic provisions and principles, both in the form of contracts between investors as shahib al mal property owners, as well as between investment managers as deputy shahib al mal with investment users. Mutual Funds are a forum used to collect funds from the public to be reinvested in securities portfolios by the Investment Manager. Sharia mutual funds are regulated in Bapepam and Financial Institution Regulation Number IX.A.13 that Sharia Mutual Funds are defined as mutual funds as referred to in UUPM and its implementing regulations whose management does not conflict with Sharia Principles in the Capital Market(<https://ojk.go.id>).

There are several types of Sharia mutual funds in accordance with POJK Number 19/POJK04/2015 concerning Issuance and Requirements for Sharia Mutual Funds. The types of Islamic Mutual Funds (RDS) that can be used as investment vehicles are: Money Market RDS, Fixed Income RDS, Stock RDS, Mixed RDS, Protected RDS, Index RDS, Collective Investment Contract (KIK) RDS whose participation units are traded on the stock exchange (Exchange Traded Fund/ ETF), RDS KIK Limited Participation, Foreign Sharia Securities-Based RDS and Sukuk-Based RDS (<https://sikapiuangmu.ojk.go.id>).

Net Asset Value (NAV) is a value that describes the net worth of each investor's sharia mutual funds every day. The NAV is in line with the movement in the value of securities included in the collection of sharia mutual fund portfolios. Mutual fund performance is measured by the Net Asset Value (NAV) of the fund (<https://sikapiuangmu.ojk.go.id>).

Inflation is an increase in the price of goods and services in general where these goods and services are the basic needs of the community or a decrease in the selling power of a country's currency (BPS, 2021). Inflation is a process of increasing prices in general and continuously within a certain period. Inflation arises because of pressure from the side supply (*cost push inflation*), from the demand side (*demand pull inflation*), and from inflation expectations. The importance of controlling inflation is based on the consideration that high and unstable inflation has a negative impact on the socio-economic conditions of society. Unstable inflation will create uncertainty for economic actors in making decisions. Empirical experience shows that unstable inflation will complicate people's decisions in consumption, investment and production, which will ultimately reduce economic growth (Bank Indonesia, 2021).

The BI Rate is the reference interest rate set by Bank Indonesia through the Board of Governors meeting every month. Since 19 August 2016, Bank Indonesia has implemented a new reference rate or policy rate, namely the BI-7Day Reverse Repo Rate (BI7DRR), replacing BI Rate. BI Instruments 7-Day (Reverse) Repo Rate used as a new policy interest rate because it can quickly affect the money market, banking and the real sector (Bank Indonesia, 2021).

Money supply can be defined in a narrow sense (M1) and in a broad sense (M2). M1 includes currency held by the public and demand deposits (current accounts denominated in Rupiah), while M2 includes M1, quasi money (including savings, time deposits in rupiah and foreign currency, and current

accounts in foreign currencies), and securities issued by the monetary system owned by the domestic private sector with a remaining term of up to one year (Bank Indonesia). Increasing the amount of money circulating in the market will increase demand for goods and services, and will drive the real sector in the form of increased production and community investment activities (Pramudiyanti, et al, 2019).

Exchange rate or currency exchange rate is the amount of domestic money needed to obtain one unit of foreign currency. The exchange rate will show the amount of domestic money needed to buy one unit of foreign currency. Unstable exchange rates will affect the prices of domestic goods and imported goods. If the Rupiah exchange rate weakens against the USD then the price of imported goods becomes more expensive, which will increase production costs in the real sector. These conditions will affect investment activities (Pramudiyanti, et al, 2019).

The Indonesian Sharia Stock Index (ISSI) is a composite index of Islamic stocks listed on the Indonesia Stock Exchange (IDX). ISSI is an indicator of the performance of the Indonesian sharia stock market. ISSI constituents are all sharia shares listed on the IDX and included in the Sharia Securities List (DES) issued by the OJK. That is, the IDX does not select sharia stocks that are included in the ISSI. ISSI constituents are re-selected twice a year, every May and November, following the DES review schedule (www.idx.co.id).

Previous research that analyzed macroeconomic variables on the net asset value of Sharia Mutual Funds conducted by Malik & Hasan (2020) the result shows that partially and simultaneously, Indonesia Sharia Stock Index (ISSI), Rupiah exchange rate, and Inflation have significant influence to Sharia Equity Fund's Net Asset Value. Research by Arifin & Nur (2019) shows that simultaneous macroeconomic variables consist of the money supply, inflation, central bank interest rates, the rupiah exchange rate, and stock indexes Sharia in Indonesia affect the performance of Sharia Mutual Funds in Indonesia.

Ardhani, *et al* (2021) show that inflation, money supply, and gross domestic products had a positive and significant effect on the net asset value of Islamic mutual funds, on the other hand, the rupiah exchange rate had a negative thus insignificant effect on the net asset value of Islamic mutual funds. Research by Azifah, *et al* (2020) according to the study's findings, inflation, exchange rate, SBIS, BI Rate, and JUB all significantly influence the net asset value (NAV) of Islamic mutual funds in Indonesia.

The research by Miha and Laila (2017) shows the result of this research shows that partially, the inflation affects the NAV of Islamic Mutual Funds insignificantly, the interest rate affects the NAV of Islamic Mutual Funds insignificantly, the currency exchange rate affects the NAV of Islamic Mutual Funds insignificantly, the money supply affects the NAV of Islamic Mutual Funds significantly, and Indonesia Crude Price affects the NAV of Islamic Mutual Fund significantly.

Based on the differences in the effect of macroeconomic variables on the growth of sukuk in previous studies, the researchers tried to re-analyze the macroeconomic variable factors that most influenced the growth of the net asset value of Islamic Mutual Funds in Indonesia. The difference between

this research and previous studies, namely the selection of macroeconomic variables and time series data in the period January 2017 to October 2022, where in the range of 2020 to 2021 the Covid-19 Pandemic conditions occurred which will affect the economy macro and the growth of Sharia Mutual Funds in Indonesia.

Based on previous research, a conceptual framework was developed to analyze macroeconomic factors that affect the total net asset value of Sharia Mutual Funds in partially and simultaneously, as follows:

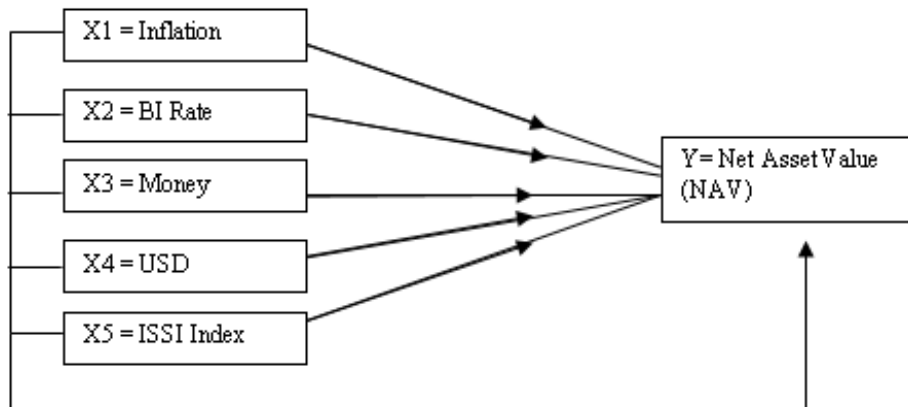


Figure 3. Research Conceptual Framework

RESEARCH METHODS

Research Method

To answer the questions in this study a quantitative method approach was used, with statistical analysis using the Multiple Linear Regression Model. According to Pandjaitan & Ahmad (2017) Multiple Linear Regression Model Analysis is a statistical analysis that links two or more independent variables X with the dependent variable Y, and aims to measure the intensity of the relationship between two or more variables and estimate the value of Y for X.

Data Collections

The type of data used by researchers is Secondary Data with monthly time series data for the period January 2017 to October 2022. Secondary data was obtained from various sources such as the Central Bureau of Statistics (BPS), Indonesia Stock Exchange (IDX), Bank Indonesia, Financial Services Authority, journals, books and other references.

Variable Operationalization

The variables used in this study are as follows:

a. Independent Variables (Independent/Unbound Variables)

The independent variable is often referred to as the predictor which is denoted by X. The independent variable is a variable that influences or causes a change or the emergence of the

dependent (bound) variable. This variable is also known as exogenous variable (Ridha, 2017). The independent variables or independent variables in this study are inflation (X1), the BI rate (X2), the amount of money in circulation (X3), the USD exchange rate (X4) and the ISSI index (X5).

b. Dependent Variable (Dependent/Dependent Variable)

The dependent variable is also called the output variable. The dependent variable's consequent criterion is the variable that is affected or becomes the result, because of the independent variables. The dependent variable is also called the indogen variable (Ridha, 2017). The dependent variable or dependent variable in this study is the net asset value of Islamic Mutual Funds (Y).

Table 2. Operational Variables

Variable	Information	Scale	Data source
Inflation (X1)	Inflation uses monthly inflation data, expressed as a percentage (%)	Ratio	BPS
BI rate (X2)	UseBI Instruments 7-Day (Reverse) Repo Rate issued every month, with the unit of percentage (%)	Ratio	OJK
Money supply (X3)	Money in the form of currency, current accounts, deposits and savings (M2), expressed in units of billions of Rupiah	Nominal	OJK
USD Exchange Rate (X4)	The national currency exchange rate (Rupiah) against foreign currencies (USD), expressed in Rupiah per USD.	Nominal	OJK
ISSI Index (X5)	The Indonesian Sharia Stock Index (ISSI) is a composite index of Islamic stocks listed on the Indonesia Stock Exchange (IDX). ISSI is an indicator of the performance of the Indonesian sharia stock market. ISSI constituents are all sharia shares listed on the IDX and included in the Sharia Securities List (DES) issued by the OJK.	Nominal	IDX
NAV (Y)	Net Asset Value (NAV) is a value that describes the net worth of each investor's sharia mutual funds every day. The NAV is in line with the movement in the value of securities included in the portfolio of Islamic mutual funds, expressed in units of billions of Rupiah	Nominal	OJK

Research Models

The data obtained is compiled and processed using statistical software, namely SPSS 23 software for modeling Multiple Linear Regression. According to Pandjaitan & Ahmad (2017) Multiple Linear Regression Analysis is a statistical analysis that connects two or more independent variables with the dependent variable Y and aims to measure the intensity of the relationship between two or more variables and make an estimate of the value of Y over X. This study focuses on explanation of the relationship between net asset value (NAV) as the dependent variable, and inflation, BI rate, money supply, USD exchange rate and ISSI index as independent variables.

The multiple linear regression model in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e$$

Where:

Y : ScoreNet Assets (NAV)

a : Constant

b₁,b₂,b₃,b₄,b₅ : Regression coefficient

X₁ : Inflation

X₂ : BI rate

X₃ : Money Circulation

X₄ : USD exchange rate

X₅ : ISSI Index

e : Standard error

RESULTS & DISCUSSION

Classical Assumption Test Results

a. Multicollinearity

The regression assumes that there is no multicollinearity between the independent variables. Multicollinearity is a situation where one or more two independent variables can be expressed as a linear combination of the other independent variables. This problem can be seen by looking at the Variant Inflation Factor (VIF) value, if the VIF value is more than 10 then multicollinearity occurs. Table 3 below shows the VIF values for the independent variables. The VIF value indicates no multicollinearity in the independent variables in this research model. So that there is no influence between the independent variables, the non-multicollinearity assumption is met.

Table 3. VIF Value

Variable	Collinearity Statistics	
	tolerance	VIF
Inflation (X1)	.627	1,595
BI Rate (X2)	.305	3,281
M2 (LnX3)	.203	4,930
Exchange rate (LnX4)	.295	3,390
ISSI (LnX5)	.596	1677

b. Normality test

In regression assuming the residuals spread following a normal distribution. Normality testing uses the Kolmogorof Smirnov test. Decision making is done by comparing the significance value of more than 0.05, then the data is normally distributed. Based on Table 4 it can be seen that the significance value is 0.200, greater than 0.05, so the residuals spread following a normal distribution.

Table 4. Kolmogorof-Smirnov Normality Test

	Test Statistics	df	Sig.
Unstandardized Residuals	.092	69	.200

c. Homogeneity Test

In regression, it assumes that the residuals have a homogeneity of variance or that heteroscedasticity does not occur. To see whether the resulting model has residuals with a homogeneous variance or not, you can do the Glejser test. This test is carried out by regressing the independent variable to the Absolute Residual value (Abs_Res). If the significance value is > 0.05 , there are no symptoms of heteroscedasticity in the regression model. In Table 5 it shows that the value of Sig. for all independent variables > 0.05 , so the conclusion in this model is that there is no heteroscedasticity.

Table 5. Glejser Homogeneity Test

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	std. Error	Betas	t	
1 (Constant)	.112	.014		7.978	<.001
Inflation (X1)	.006	.020	.050	.315	.754
BI Rate (X2)	.018	.040	.103	.454	.652
M2 (LnX3)	.187	.246	.210	.759	.451
Exchange rate (LnX4)	-.460	.700	-.151	-.658	.513
ISSI (LnX5)	-.263	.301	-.141	-.873	.386

a. Dependent Variable: Abs_Res

d. Autocorrelation Test

In the regression analysis assumes no autocorrelation between observations. Autocorrelation testing using the Darbin-Watson (DW) test. The basis for making a decision is to compare the calculated Durbin Watson (DW) value with the table (DW) value.

Basis for decision making:

1. If $0 < dw < dl$, there is a positive autocorrelation
2. If $4-dl < dw < 4$, there is a negative autocorrelation.
3. If $du < dw < 4-du$, there is no positive or negative autocorrelation.
4. If $dl < dw < du$ or $4-du < dw < 4-dl$, no decision is made.

Description: dl : lower limit dw, du : upper limit dw

Table 5. Darbin-Watson Test Results

dl value	Value two	dw value	Value Comparison
1.4588	1.7680	2022	du < dw < 4-du

From the calculation above, $dw > du$ and $(4-du) > dw$ so that there is no positive or negative autocorrelation in the model.

Results of Hypothesis Testing and Data Analysis

To see the factors that affect net asset value (NAV) is done in 2 ways, namely by partial test (t test) and simultaneous test (f test). In making the estimator model, it is suspected that net asset value (NAV) is influenced by inflation, BI rate, money supply, USD exchange rate and ISSI index.

The results of multiple regression analysis with the help of the SPSS application obtained the following equation:

$$\text{LnY} = -0.001 + 0.04 \text{ X1} + 0.014 \text{ X2} + 3.185 \text{ Ln X3} - 1.760 \text{ LnX4} - 2.170 \text{ LnX5} + e$$

To interpret the results of the regression model, it can be explained that the value of the constant is -0.001, meaning that if the variable inflation, BI rate, money supply, USD exchange rate and ISSI have a value of 0, then NAV growth is negative, namely -0.001. The regression coefficient of the inflation variable (X1) is positive, namely 0.014, meaning that each inflation increases by 1 unit, it will increase the NAV by 0.04 units. The regression coefficient of the BI rate (X2) has a positive value of 0.014, meaning that each increase in the BI rate by 1 unit will increase the NAV value by 0.014 units. The regression coefficient of the money supply (X3) is positive by 3,185, meaning that every increase in the money supply by 1 unit will increase the NAV value by 3,185 units. The regression coefficient of the USD exchange rate variable (X4) is negative, i.e. -1,760, meaning that every USD exchange rate increases by 1 unit, it will decrease the NAV by 1,760 units. The regression coefficient of ISSI (X5) is negative, namely -2,170, meaning that every increase in the ISSI index by 1 unit will decrease the NAV value by 2,170 units.

The coefficient of determination R Square from the multiple regression model is as follows:

Table 6. R-Square Determination Coefficient Value

Summary model b				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.931a	.867	.856	.16599
a. Predictors: (Constant), inflation, BI rate, money supply, USD exchange rate and ISSI				
b. Dependent Variable: NAV				

The coefficient of determination R Square obtained is 0.931. This shows that 93.1% of the dependent variable (NAV) can be explained by independent variables (inflation, BI rate, money supply, exchange rate and ISSI), while the remaining 6.7% is influenced by other independent variables that have not been included in the model.

1) Test the influence of variables partially

This partial test will test the research hypothesis using the T test. Decision making is based on a comparison of the significance value on the T test with $\alpha = 0.05$. Table 7 shows the results of the T test.

Table 7. Partially Variable Influence Test Results

	Model	Unstandardized Coefficients		Standardized Coefficients	
		B	std. Error	t	Sig.
1	(Constant)	-.001	.020		
	Inflation (X1)	.004	.028	.007	.127
	BI Rate (X2)	.014	.057	.020	.238
	M2 (LnX3)	3,185	.353	.922	9025
	Exchange rate (LnX4)	-1,760	1,002	-.149	-1,756
	ISSI (LnX5)	-2,170	.431	-.300	-5,034

a. Dependent Variable: NAV (LnY)

a. Effect of Inflation on Net Asset Value of Sharia Mutual Funds

Based on the results of this study indicate that the inflation variable has no significant effect on NAV. The partial test results show a significance value of $0.899 > \alpha 0.05$, meaning that there is no significant effect of the inflation variable on the net asset value of Islamic Mutual Funds. With changes in the inflation variable, it does not have a significant effect on the net asset value of Islamic Mutual Funds.

The results of this study are not in line with the research of Malik & Hasan (2020), Arifin & Nur (2019), Ardhani, *et al* (2021), the results show that inflation had a significant effect on the net asset value of Sharia mutual funds. An increase in inflation will cause an increase in interest rates and will increase investment returns for investors, including in securities instruments such as bonds. However, in line with the results of research by Miha and Laila (2017) that partially, the inflation affects the NAV of Islamic Mutual Funds insignificantly. When the inflation rate increases, the real income or return received by investors will decrease. Therefore, the higher the inflation, the riskier the investment activity in Islamic mutual funds, so that this can lead to a decrease in the net asset value of Islamic mutual funds. However, this study shows that the inflation rate has no significant effect on the net asset value of Islamic mutual funds. The Indonesian government has in recent years maintained a low inflation rate so that economic conditions are stable, especially during the Covid-19 Pandemic.

b. The Effect of the BI Rate on Net Asset Value of Sharia Mutual Funds

Based on the results of this study indicate that the BI rate variable has no significant effect on NAV. The results of the partial test show a significance value of $0.899 > \alpha 0.05$, meaning that there is no significant effect of the BI rate variable on the net asset value of Sharia Mutual Funds. With changes in the BI rate variable, it has no significant effect on the net asset value of Sharia Mutual Funds.

BI Rate determined through BI Instruments *7-Day (Reverse) Repo Rate* can quickly affect the money

market, banking and the real sector. When the BI rate rises, it will cause interest rates on the money market and banking to rise, so that investors will respond by investing in the money market or depositing funds in banks, and withdrawing funds from the bond market. However, in this study, the interest rate of the BI rate shows no significant effect on the net asset value of Sharia Mutual Funds. When the BI rate increases, investors do not necessarily withdraw their funds from Sharia Mutual Funds, unlike conventional capital market products which are sensitive to changes in interest rates. The results of this study are in line with the results of Miha and Laila's research (2017) but are not in line with the research of Malik & Hasan (2020), Arifin & Nur (2019), Ardhani, *et al* (2021), the results show that the BI rate has a significant effect on the net asset value of Islamic mutual funds.

c. The Effect of Money Supply on the Net Asset Value of Sharia Mutual Funds

Based on the results of this study indicate that the money supply variable has a significant effect on NAV. The results of the partial test show a significance value of $0.001 < \alpha 0.05$, meaning that there is a significant effect of the money supply variable on the net asset value of Sharia Mutual Funds. With an increase in the money supply, it will be followed by an increase in the net asset value of Sharia Mutual Funds.

The results of this study are in line with research Ardhani, *et al* (2021); research by Arifin & Nur (2019); Miha and Laila (2017). The more money in circulation will increase investment activity. The public will prefer to invest their money in securities rather than save it, because it is certain that the real value of money will decrease in the future due to high money circulation (Kurniawan, *et al*, 2020).

d. Effect of the USD Exchange Rate on Net Asset Value of Sharia Mutual Funds

Based on the results of this study indicate that the exchange rate variable affects the outstanding value of corporate bonds at $\alpha 0.01$. The partial test results show a sig value of $0.084 < \alpha 0.01$, meaning that there is a significant effect of the exchange rate variable on the NAV. With changes in the USD exchange rate against the Rupiah, it has a significant effect on the net asset value of Sharia Mutual Funds. Based on the coefficient value of the USD exchange rate variable, it shows a negative relationship, where if the USD exchange rate rises (the Rupiah depreciates) then the net asset value decreases, and vice versa.

The results of this study are in line with the research results of this study in line with the results of Malik & Hasan's research (2020), Arifin & Nur (2019) that the results show that the exchange rate had a significant effect on the net asset value of Islamic mutual funds. However, this is not in line with the research results of Ardhani, *et al* (2021) and Miha and Laila (2017) who found the exchange rate had insignificant effect on the net asset value of Islamic mutual funds.

e. The Effect of the ISSI Index on the Net Asset Value of Sharia Mutual Funds

Based on the results of this study, it shows that the ISSI index variable has an effect on NAV. The results of the partial test show a significance value of $0.001 < \alpha 0.05$, meaning that there is a significant effect of the ISSI variable on the net asset value of Islamic Mutual Funds. Based on the coefficient value of the ISSI variable, it shows a negative relationship, where if the ISSI index increases, the net

asset value decreases, and vice versa.

The results of this study are in line with research Malik & Hasan (2020) and Arifin & Nur (2019) that Sharia stock indexes in Indonesia affect the performance of Sharia Mutual Funds in Indonesia. The result show that the increase in ISSI reflects the improved performance of sharia-based companies so that it has the potential to earn more revenue. Increased company revenue will cause an increase in stock prices. The increase in stock prices will of course also affect the increase in net asset value of equity-based mutual fund products, one of which is an Islamic mutual fund. However, this research shows a negative relationship, where the increase in the value of the ISSI index was not responded to by an increase in the net asset value of sharia mutual funds, especially in the period 2020 to 2022 but the net asset value has decreased due to investment in disbursed sharia mutual funds.

2) Test the effect of variables simultaneously

Table 8. Simultaneous Variable Influence Test Results

ANOVA ^a						
	Model	Sum of Squares	df	Mean-Square	F	Sig.
1	Regression	11,293	5	2,259	81,980	<.001b
	residual	1,736	63	.028		
	Total	13029	68			
a. Dependent Variable: NAV						
b. Predictors: (Constant),inflation, BI Rate, money supply, USD exchange rate and ISSI						

Based on Table 8 shows the significance of the F test shows a significant value of $0.001 < \alpha < 0.05$. This shows that the independent variables (inflation, BI rate, money supply, USD exchange rate and ISSI) together have a significant effect on the dependent variable, namely the net asset value of Sharia Mutual Funds.

CONCLUSIONS AND SUGGESTIONS

From this study, it was found that the macroeconomic factors that significantly influence the net asset value of Sharia Mutual Funds in Indonesia are the variable money supply, the USD exchange rate and the ISSI index. Factors that do not affect the net asset value of Sharia Mutual Funds in Indonesia significantly are inflation and BI rate variable. As for the variables Inflation, BI Rate, money supply, USD exchange rate and ISSI, simultaneously affect the net asset value of Sharia Mutual Funds in Indonesia.

From the results of this study, investors are expected to pay attention all macroeconomic variables that can affect the NAV of sharia mutual funds, so that they can consider investment decisions to minimize the risk of loss from investments made. Future research can use other variables that have not been used in this study, such as gold prices, world oil prices, GDP or economic growth variables. In addition, internal factors in the management of Islamic mutual fund investments carried out by

Investment Manager Companies can be used as micro variables which are expected to influence the NAV of Islamic Mutual Funds. It is also recommended to use other research methods such as the panel data method with data variants per type of sharia mutual fund, or by other methods such as VAR-VECM and others.

REFERENCES

- [1] Aldiansyah, Fifi AT, Fatmi Hadiani. Analysis of Factors Influencing Net Asset Value of Islamic Mutual Funds (2016-2019 Period). *Journal of Applied Islamic Economics and Finance*. Vol. 1, No. 2, February 2021, pp. 412–423
- [2] Ardhani, IA, Jaenal Effendi, Mohammad Iqbal Irfany. The effect of macroeconomics variables to Net Asset Value (NAV) growth of sharia mutual funds in Indonesia. *Journal of Islamic Economics & Finance*, Vol. 6 No. 2, July 2020: 134-148. <https://journal.uin.ac.id/index.php/jeki>
- [3] Arifin, MR & Muhammad AN. Performance Stability of Islamic Mutual Funds in Facing Macroeconomic Turmoil. *Indonesian Journal of Islamic Literature and Muslim Society*. Vol. 4, No.2, July-December 2019, ISSN: 2528-1194 (p); 2528-1224
- [4] Azifah, N, Stevani ANH, Siti Aisyah. Determinants of Macroeconomic Indicators on Sharia Mutual Funds in Indonesia for the 2014-2021 Period. *Jurnal Jaman*. Vol 2 No. April 1, 2022, pISSN: 2828-691X, eISSN: 2828-688X, Pages 56-67
- [5] Bank Indonesia. (2020). Indonesia Economic Report 2020.
- [6] Kurniawan, Masitoh E, and Fajri, RN (2020). The Effect of Macroeconomic Variables on the Growth of Corporate Sukuk in Indonesia. *Journal of Islamic Accounting and Banking, Finance* Vol 3.No1, 2020.
- [7] Malik FA & Hasan H. Analysis of the Influence of Rupiah Exchange Rate for US Dollars, Sharia Indonesia Stock Index (ISSI), and Inflation on Clean Actual Value of Sharia Reksdana in 2013-2017 Period. *International Journal of Economics, Business and Management Research*. Vol. 4, No. 08; 2020. ISSN: 2456-7760
- [8] Miha, C & Laila, N. The Effect of Macroeconomic Variables on Net Asset Value (NAV) of Islamic Mutual Funds in Indonesia *Journal of Theory and Applied Sharia Economics*. Vol. 4 No. February 2, 2017: 144-158
- [9] Muhammad R, Imtinani Arifah, Peni Nugraheni. Factors Influencing the Performance of Islamic Mutual Funds in Indonesia and Malaysia. *Ocean Journal of Economics and Business*. Volume 12, Number 2, July 2021. Faculty of Economics, Samudra University. DOI number 10.33059/jseb.v12i2.2556
- [10] Nur Kholidah, Mifahur Rahman Hakim, and Edy Purwanto, “Analysis of Sharia Equity Mutual Fund Performance Using the Sharpe, Treynor, Jensen, M2, and T Method,” *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)* 1, no. 2 (2019), pp. 29–40
- [11] Otoritas Jasa Keuangan. (2021). Sharia Financial Progress Report.
- [12] Pandjaitan, DR H and Aripin, A. (2017). Research Methods For Business. Media heritage.
- [14] Pardiansyah, E. (2017). Investasi dalam perspektif ekonomi Islam: Pendekatan teoritis dan empiris. *Economica: Jurnal Ekonomi Islam*, 8(2), 337-373. doi : 10.21580/economica.2017.8.2.1920.
- [15] Pramudiyanti H, Indrawati, L.R, dan Rusmijati. (2019). Pengaruh Variabel Makroekonomi terhadap Pertumbuhan Sukuk Korporasi di Indonesia Tahun 2002-2018. *DINAMIC: Directory Journal of Economic Volume 1 Nomor 4 Tahun 2019*.
- [16] Putra and S. Fauzie. Analisis Perbandingan Kinerja Reksa Dana Konvensional Dengan Reksa Dana Syariah Di Indonesia. *Jurnal Ekonomi dan Keuangan*. Vol. 2, no. 5 (2014), pp. 282- 295
- [17] Rapini T, Umi Farida, Rizki Listyono Putro. Eksistensi Kinerja Reksadana Syariah pada Era New Normal. *Jurnal Tabarru': Islamic Banking and Finance*. Volume 4 Nomor 2, November 2021. p-ISSN 2621-6833 e-ISSN 2621-7465356
- [18] Ridha, N. (2017). Proses Penelitian, Masalah, Variabel, dan Paradigma Penelitian. *Jurnal Hikmah*.

- [19] Sukirno, S. (1997). *Pengantar Teori MikroEkonomi* (2nd ed.). PT. RajaGrafindo Persada.
- [20] Website:
<https://dsnemui.or.id/>
<https://www.ojk.go.id/>
<https://www.bps.go.id/> <https://www.bi.go.id/>
<https://www.kemendag.go.id/>