Research Article

The Effect of Exchange Rate, Money Supply, Inflation, and BI-7DRR on Net Asset Value of Sharia Mutual Funds

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Abstract
This research aims to examine the individual and combined impacts of the Rupiah Exchange Rate (Exchange Rate), Money Supply, Inflation, and BI 7DRR on the Net Asset Value (NAV) of Sharia Mutual Funds. The study employs a quantitative approach using secondary data, with a sample size of 60 NAV data points from Islamic Mutual Funds recorded monthly between January 2016 and December 2020. The Error Correction Model (ECM) Engel-Grange is utilized as the analytical method. The findings indicate that, on a partial basis, the Exchange Rate and BI 7DRR variables do not have a significant influence on the NAV of Sharia Mutual Funds. However, the Money Supply and Inflation variables demonstrate a positive and significant impact on the NAV of these funds. Moreover, when considered together, the Exchange Rate, Money Supply, Inflation, and BI 7DRR variables jointly exhibit a significant effect on the NAV of Sharia Mutual Funds. As a result, it is suggested that the government should create a secure and profitable environment for Sharia mutual funds to foster continuous growth. An evident sign of the expansion of Islamic mutual funds is the increasing number of units offered to investors in the community.

Keywords: Rupiah Exchange Rate (Exchange Rate), Total Money Supply, Inflation, BI 7DRR

JEL Classification: F65, G30, P24

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1. Introduction

The capital market caters to the trading of various long-term financial instruments, serving as a source of funding for companies and institutions and facilitating investment activities. Similarly, the Islamic Capital Market operates with the same purpose, but it ensures that all its activities comply with Islamic principles without any conflicts (Bursa Efek Indonesia, 2022).

The Islamic capital market exists to cater to the investment needs of Muslims in Indonesia who seek to participate in the capital market while adhering to Sharia principles. Some Muslims believe that investing in the conventional capital market may not align with Islamic teachings. However, Indonesia also aims to attract foreign investors to invest in its capital market while accommodating the requirements of Islamic finance (Faniyah, 2017).

According to Hoesen, the Chief Executive of Capital Market Supervision at the Financial Services Authority (OJK), the Islamic Capital Market in Indonesia has witnessed remarkable growth in recent times. This growth can be attributed to the rising awareness among the public about investing in instruments that adhere to Islamic principles and the widespread availability of electronic Islamic instruments within the Indonesian capital market. Among the Islamic Capital Market instruments, Mutual Funds have seen a notable surge, offering an alternative investment option for individuals with limited capital and requiring expert guidance to assess investment risks (Ototitas Jasa Keuangan, 2022).

According to Bapepam and LK Regulation Number IX.A.13, Sharia Mutual Funds, like Mutual Funds in general, provide an alternative investment opportunity for investors, especially for small investors or those who may need assistance in assessing investment risks due to their limited time and expertise. Mutual Funds are structured to gather funds from individuals with capital and a desire to invest but possess limited knowledge and time for managing their investments.

As stated by Hadi (2018) and Santosa & Huda (2020), the progress of Islamic Mutual Funds is evident through the changes in their Net Asset Value (NAV) over the years. The Net Asset Value (NAV) plays a vital role as a key reference for evaluating the performance of Mutual Funds and is used to establish the buying and selling prices of individual units of Mutual Fund participation. It signifies the value of Mutual Fund assets after deducting its liabilities.

The increase in the Net Asset Value (NAV) of Islamic Mutual Funds is closely linked to a nation's macroeconomic factors, which have a substantial impact on the NAV, both positively and negatively. These factors encompass the Rupiah Exchange Rate (Exchange), Total Money Supply, Inflation, and BI 7DRR (Bank Indonesia's policy interest rate). Investors are advised to take these factors into account when evaluating the NAV of Islamic Mutual Funds.

Another significant factor influencing the Net Asset Value (NAV) of Islamic Mutual Funds is the Money Supply. Anwar & Nirmala (2022) define the money supply as M1 plus quasi-money, represented by M2. The amount of money circulating within the economy reflects the country's overall economic condition (Sukirno, 2013). Al-Abbasy (2013) explains that an increase in the money supply can lead to inflation and a rise in overall prices. When the government manages the prices of essential goods and other factors, any increases in the money supply will affect the financial market sector, potentially leading to price hikes and impacting the NAV of Islamic Mutual Funds.

Inflation holds significant importance as a macroeconomic factor that strongly influences the investment landscape, particularly in relation to the Net Asset Value (NAV) of Islamic Mutual Funds. Fluctuations in the inflation rate can influence the monetary authority's policy decisions, which, in turn, impact investors' choices regarding the allocation of their investment funds.

According to the Central Bureau of Statistics (BPS), BI 7DRR is a policy interest rate that signifies Bank Indonesia's publicly announced monetary policy stance. The Net Asset Value (NAV) of Islamic Mutual Funds can be influenced by BI 7DRR, particularly when Bank Indonesia...
Sholeha, Fadhlillah

2. Literature Review

Investment Management

According to Wefi (2020), Investment management is professional management that manages various types of securities or securities such as mutual funds, stocks, bonds, and other assets such as property which aim to achieve investment targets and can benefit investors. Investors or financiers are bodies or individuals who buy ownership of a company going public (Herlianto, 2013). Investors are divided into two, namely individual investors and institutional investors. Individual investors make investments on behalf of themselves, while institutional investors are those made on behalf of institutions (Handayani et al., 2019).

Portfolio Theory

Portfolio theory relates to investors' risk and returns expectations estimates, which can be measured statistically to construct investment portfolios (Adnyana, 2020). In practice, investors often diversify their investments by combining various securities or in other words creating a portfolio. Whereas in reality, it would be difficult to form a portfolio consisting of various securities (investment opportunities), a representative consisting of many stocks or market indices is usually used (Santosa, 2019).

Sharia Mutual Funds

In 1998, PT. Investment Management Mutual Funds introduced Sharia Mutual Funds in Indonesia, offering Mutual Fund products based on Sharia principles, specifically the Mixed Mutual Fund type known as Balanced Sharia Mutual Funds. MUI DSN (National Sharia Council) Fatwa No. 20/DSN-MUI/IX/2000 defines Islamic Mutual Funds as Mutual Funds that operate according to the terms and principles of Islamic sharia, such as relationships and contracts between capital owners (shahibul al-mal/ rabb al-mal), investment managers (representatives of shahibul al-mall) and investment users (Bilgies et al., 2023).

Net Asset Value (NAV)

Net Asset Value (NAV) is the purchase price per investment unit that investors must pay. The NAV is also the selling price if investors want to withdraw their funds from the investment manager. Each Mutual Fund has its pattern in its NAV movement. From this NAV value, it will later be known whether there is any influence between the increase in bank interest rates and the NAV size. Changes in NAV provide an indicator of the investment performance of a Mutual Fund. Because Mutual Funds are a portfolio of various investment instruments, NAV fluctuations are influenced by each security's market value (Santosa & Huda, 2020).

Rupiah Exchange Rate

The Rupiah Exchange Rate is the difference in the value of the Indonesian currency in units of rupiah with other countries' currencies in units of that country. The depreciation of the exchange rate, which shows the lower price of domestic money in foreign currencies, will result in capital inflows so that demand and share prices will increase, which then inflows of capital will increase the NAV of Islamic Mutual Funds (Handayani et al., 2019). Conversely, if the exchange rate is appreciated, it will impact marketing developments abroad related to Indonesian products, especially in price competitiveness. Of course, this will affect the trade balance due to the decline in the value of exports compared to imports which will also affect the balance of payments. The deteriorating balance of payments can affect the confidence of foreign investors in the Indonesian economy, which can hurt the buying and selling of shares on the capital market resulting in capital outflows. Capital outflows can indirectly result in a decrease in the NAV of Islamic Mutual Funds.
Total Money Supply
According to Natsir (2012), the money supply is the amount or all of the money in an economy. The money supply includes all paper currency and coins circulating in the community, both outside the safe deposit boxes (cash) of financial institutions and the government and in current accounts at deposit institutions (commercial banks) owned by individuals and companies. When the money supply increases, it shows an increase in the real wealth of investors. So there is an increase in public interest in investing in Mutual Funds.

Inflation
Yuliadi (2019) Inflation is an increase in prices in general and lasts for a long time, meaning that if the price increases only for certain types of commodities and lasts for a short time, then it is not said to be inflation. According to a statement by world economic figure Milton Friedman, the factors of change in administered prices are the prices of certain goods and services whose price levels are determined unilaterally by the government, state-owned enterprises, and cartels, such as the price of fuel oil (BBM), water, electricity, and supply-shock phenomena which greatly affected the economy both from the domestic side (such as drought and crop failure) and the internal side (such as rising prices of imported goods and changes in international interest rates).

BI 7DRR
The Financial Services Authority has provided clarity that the BI Rate represents a policy interest rate reflecting Bank Indonesia's monetary policy stance, and it is publicly announced. This rate is established through the monthly Board of Governors' Meeting (RDG) and is employed in liquidity management within the money market to accomplish the operational objectives of monetary policy. Implemented since 2005, the BI Rate remains in effect until the subsequent RDG. If unforeseen developments arise, adjustments to the rate can be made through weekly RDGs. Recently, Bank Indonesia introduced a new reference interest rate, the BI 7-day (Reverse) Repo Rate (BI 7DRR), replacing the BI Rate to align with international best practices in monetary operations. The BI 7DRR serves as the new policy interest rate, known for its swift influence on the money market, banking, and the real sector.

Hypothesis
Relationship between Rupiah Exchange Rate and Net Asset Value (NAV) of Islamic Mutual Funds
The results of previous research conducted by Syntia (2021) show that the exchange rate positively and significantly affects the NAV of Islamic Mutual Funds. An increase in the exchange rate (depreciation of the rupiah) indicates that the cheaper the price of the rupiah against foreign currencies, especially the US dollar, so that there will be capital inflows to Indonesia which will result in demand and stock prices increase. Then the capital flow will increase the NAV of Islamic Mutual Funds. Conversely, if the exchange rate appreciates, there will be a capital outflow which results in an indirect outflow of capital and a decrease in the NAV of the Islamic Mutual Funds.
H1: The Rupiah Exchange Rate has a positive and significant effect on the NAV of Islamic Mutual Funds

The Relationship between the Money Supply and the NAV of Islamic Mutual Funds
The results of previous research conducted by Wirman (2020) & Zaman (2017) show that the amount of money in circulation has a positive and significant effect on the Net Asset Value (NAV) of Islamic Mutual Funds. This finding is in-line with the opinion of Natsir (2012), who said that when the money supply increases in society, it will result in high liquidity among them. If liquidity is high, people will be encouraged to look for distribution channels through the productive allocation of funds. On the other hand, high liquidity in the community can also result in an upward trend in stock prices. With the community's efforts to allocate their wealth due to high liquidity and stock price trends that show an increase, in the end, encouraging individuals to invest their funds in the capital market, including Islamic Mutual Funds, will lead to an increase in the Net Asset Value (NAV) of Islamic Mutual Funds.
H2: The Money Supply has a positive and significant effect on Net Asset Value (NAV) of
Islamic Mutual Funds

Relationship of Inflation to Mutual and Sharia Net Asset Value (NAV) of Islamic Mutual Funds

According to the results of previous research conducted by Setyani & Gunarsih (2018) and Shofia et al. (2018) state that inflation has a positive and significant effect on the Net Asset Value (NAV) of Islamic Mutual Funds. This statement is in line with Karim's opinion (2017), which says that increasing inflation will make people more inclined to spend their money on the non-primary sector and luxury goods so that investment will be directed to the non-productive sector, hoarding assets. By targeting the public towards non-productive sectors, investment opportunities will become more open due to the positive prospects seen by investors. This can then cause the NAV of Sharia Mutual Funds to increase.

**H3**: Inflation has a positive and significant effect on Net Asset Value (NAV) of Islamic Mutual Funds

Relationship between BI 7DRR and Net Asset Value (NAV) of Islamic Mutual Funds

According to the results of previous research conducted by Nurrahmawati et al. (2021), BI 7DRR had a negative and significant effect on the NAV of Islamic Mutual Funds. This discovery aligns with Bank Indonesia's (BI) theory, stating that a decrease in the BI 7-day (Reverse) Repo Rate (BI 7DRR) leads to lower lending rates, stimulating increased credit demand from companies and households. The reduced lending rates also lower companies' capital costs for investment, encouraging higher consumption and investment activities, thereby accelerating economic growth and resulting in an increase in the NAV of Sharia Mutual Funds.

**H4**: BI 7DRR has a negative and significant effect on the NAV of Islamic Mutual Funds

Research Concept Framework

The conceptual framework forms the fundamental basis and serves as a guiding structure for the research. The study encompasses several variables, including the dependent variable, which is the Net Asset Value (NAV) of Islamic Mutual Funds for the period from 2016 to 2020. Additionally, there are independent variables, such as the Rupiah Exchange Rate, Total Money Supply, Inflation, and BI 7DRR. These independent variables are considered as factors that influence the dependent variable. The relationship between these variables is illustrated in the conceptual framework presented below:

![Conceptual Framework Image]

**Figures 1. Research Concept Framework**

### 3. Data and Method

**Types of research**

This type of research used by the author is a quantitative method. Siyoto (2015) states that quantitative methods are systematic, planned, and clearly structured from starting to making the
research design. The data used by the author is time series data, which is a collection of observational data within a certain time span and at continuous time intervals.

**Data Types and Sources**
This study employs a quantitative research approach using secondary data as the primary source of information. Secondary data refers to data collected from intermediary sources to fulfill the research data requirements. Specifically, the secondary data chosen for this study is of the external type, meaning it was compiled by entities other than the researcher from relevant organizations. The secondary data was sourced from official government websites related to the Capital Market, including the Financial Services Authority, Bank Indonesia, and the Central Bureau of Statistics.

**Data collection technique**
The data collection technique used in this study is to use documentary or documentary data collection techniques, namely data that contains what and when an event occurred and who was involved in that event. In this study, the authors used this data collection technique to find out the history of the variables selected by the researcher on the NAV of Islamic Mutual Funds for the 2016 – 2020 period.

**Population and Sample**
The study's population comprises the Net Asset Value (NAV) of Sharia Mutual Funds on a monthly basis from 2016 to 2020. For sampling purposes, the total sampling technique was employed, where the number of samples is equal to the number of the entire population. So based on the type of sample chosen by the researcher, a sample of 60 was obtained from 12 months a year multiplied by the research period from 2016 – 2020, which is five years.

**Data analysis method**
In this study, the data analysis method utilized time series data covering the period from 2016 to 2020. The model employed for the analysis is the Error Correction Model (ECM); this model emerged because econometric experts paid special attention to time series econometrics. After all, time series data are often not stationary. Regression with non-stationary data will result in dubious or spurious regression results. The regression that results in an oblique regression, there is a possibility of an imbalance in the short term, but an equilibrium occurs in the long term (Widarjono, 2017).

4. Results
**Stationarity Test**

<table>
<thead>
<tr>
<th>Series</th>
<th>Prob.</th>
<th>Lag</th>
<th>Max Lag</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAV</td>
<td>0.8728</td>
<td>0</td>
<td>10</td>
<td>59</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>0.1340</td>
<td>0</td>
<td>10</td>
<td>59</td>
</tr>
<tr>
<td>Money Supply</td>
<td>0.9661</td>
<td>1</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.8458</td>
<td>0</td>
<td>10</td>
<td>59</td>
</tr>
<tr>
<td>BI7DRR</td>
<td>0.3192</td>
<td>1</td>
<td>10</td>
<td>58</td>
</tr>
</tbody>
</table>

Table 1 above shows that all variables are not stationary; it can be seen from the probability value of each variable which shows a number greater than 0.05. If not fulfilling the stationarity assumption at degree zero or I (0), all variables will be tested again by testing the degree of integration at the first difference level.
Table 2. Results of the Degree of Integration Test (First Difference)

<table>
<thead>
<tr>
<th>Method</th>
<th>Statistic</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADF - Fisher Chi-square</td>
<td>165.388</td>
<td>0.0000</td>
</tr>
<tr>
<td>ADF - Choi Z-stat</td>
<td>-11.6831</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Series</th>
<th>Prob.</th>
<th>Lag</th>
<th>Max Lag</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(NAV)</td>
<td>0.0000</td>
<td>0</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>D(Exc. Rate)</td>
<td>0.0000</td>
<td>0</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>D(Money supply)</td>
<td>0.0000</td>
<td>1</td>
<td>10</td>
<td>57</td>
</tr>
<tr>
<td>D(Inflation)</td>
<td>0.0000</td>
<td>0</td>
<td>10</td>
<td>58</td>
</tr>
<tr>
<td>D(BI7DRR)</td>
<td>0.0000</td>
<td>0</td>
<td>10</td>
<td>58</td>
</tr>
</tbody>
</table>

Table 2 above shows all stationary variables, which can be seen from the probability value, which shows a number less than 0.05. This means that all variables have passed the first difference data.

Cointegration Test

Table 3. Cointegration Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Rate</td>
<td>-0.011772</td>
<td>0.590853</td>
<td>-0.019924</td>
<td>0.9842</td>
</tr>
<tr>
<td>Money Supply</td>
<td>6.053959</td>
<td>0.294999</td>
<td>20.52194</td>
<td>0.0000</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.363592</td>
<td>0.091701</td>
<td>3.964952</td>
<td>0.0002</td>
</tr>
<tr>
<td>BI7DRR</td>
<td>-0.002176</td>
<td>0.133637</td>
<td>-0.016283</td>
<td>0.9871</td>
</tr>
<tr>
<td>C</td>
<td>-84.01342</td>
<td>4.186358</td>
<td>-20.06838</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.965557</td>
<td>Mean dependent var</td>
<td>10.25614</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.963052</td>
<td>SD dependent var</td>
<td>0.644113</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 above shows that R-squared is still high with a value of 0.965, and there are two variables that affect Y in the long term, namely Money Supply and inflation; the rest, namely Exchange Rate and BI 7DRR, do not affect Y in the long term. This result can be seen from the probability values of the Money Supply and Inflation variables which show a value of 0.00 <0.05, while the Exchange Rate and BI 7DRR show a value of 0.98 > 0.05.

Error Correction Model (ECM) Estimation Test

After carrying out the stationarity test and cointegration test, before carrying out the ECM test, the researcher conducted the ECT test first to find out whether or not there was a short-term and long-term relationship in this model. The following are the results of the ECT test:

Table 4. ECT Test Results

<table>
<thead>
<tr>
<th></th>
<th>t-Statistic</th>
<th>Prob. *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented Dickey-Fuller test statistic</td>
<td>-4.012227</td>
<td>0.0026</td>
</tr>
<tr>
<td>Test critical values:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% level</td>
<td>-3.546099</td>
<td></td>
</tr>
<tr>
<td>5% level</td>
<td>-2.911730</td>
<td></td>
</tr>
<tr>
<td>10% level</td>
<td>-2.593551</td>
<td></td>
</tr>
</tbody>
</table>

According to the data presented in Table 4, the model displays a significant short-term and long-term relationship, as indicated by the Error Correction Term (ECT) probability value of 0.002, which is below the significance level of 0.05. These results enable researchers to perform the Error Correction Model (ECM) test, and the outcomes of the ECM test are detailed below:

Table 5 above shows that ECT has passed with a probability of 0.001 <0.05, meaning the ECM has been fulfilled. Then no other variables affect Y in the short term, as indicated by the probability value of each variable greater than 0.05. This ECM was carried out to avoid spurious (false) regression indicated by the R-squared value, which was originally 0.965 to 0.183.
Table 5. ECM Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(Exc. Rate)</td>
<td>0.220390</td>
<td>0.375370</td>
<td>0.587127</td>
<td>0.5596</td>
</tr>
<tr>
<td>D(Money Supply)</td>
<td>0.438680</td>
<td>0.727841</td>
<td>0.602714</td>
<td>0.5493</td>
</tr>
<tr>
<td>D(Inflation)</td>
<td>0.033327</td>
<td>0.095525</td>
<td>0.348884</td>
<td>0.7286</td>
</tr>
<tr>
<td>D(BI7DRR)</td>
<td>0.049033</td>
<td>0.217304</td>
<td>0.225643</td>
<td>0.8223</td>
</tr>
<tr>
<td>ECT(-1)</td>
<td>-0.277560</td>
<td>0.083925</td>
<td>-3.307249</td>
<td>0.0017</td>
</tr>
<tr>
<td>C</td>
<td>0.031978</td>
<td>0.010299</td>
<td>3.104930</td>
<td>0.0031</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.183040</td>
<td>Mean</td>
<td>0.033347</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.105968</td>
<td>SD</td>
<td>0.070065</td>
<td></td>
</tr>
</tbody>
</table>

Classic assumption test
Normality test

According to Figure 2, all variables exhibit a normal distribution, as evidenced by the probability value of 0.899, which is higher than the significance level of $\alpha = 0.05$. Therefore, it can be inferred that the data used in this study follow a normal distribution pattern.

Multicollinearity Test
Upon performing the normality test, the researcher proceeded to conduct a multicollinearity test to determine if there is any multicollinearity among the independent variables within the model. It is essential for a good model that the independent variables do not exhibit strong correlations.

Below are the results of the multicollinearity test:

Table 6. Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(Exc. Rate)</td>
<td>0.231791</td>
<td>684471.2</td>
<td>3.039189</td>
</tr>
<tr>
<td>Log(Money Supply)</td>
<td>0.138568</td>
<td>604893.7</td>
<td>4.323741</td>
</tr>
<tr>
<td>Log(Inflation)</td>
<td>3.16E-05</td>
<td>2.437957</td>
<td>2.405979</td>
</tr>
<tr>
<td>LOG(BI7DRR)</td>
<td>0.000338</td>
<td>43.76591</td>
<td>1.620330</td>
</tr>
<tr>
<td>ECT(-1)</td>
<td>0.000137</td>
<td>1.091312</td>
<td>1.090615</td>
</tr>
<tr>
<td>C</td>
<td>0.628923</td>
<td>364989.8</td>
<td>NA</td>
</tr>
</tbody>
</table>

Based on the findings presented in Table 6, the results demonstrate that there is no multicollinearity observed among the independent variables. This is evident as all the Variance Inflation Factor (VIF) values are below 10, indicating that this study did not encounter any issues with multicollinearity between the independent variables.

Heteroscedasticity Test
After conducting the heteroscedasticity test, the results indicate that there is no heteroscedasticity problem in this model. The Chi-Square value of 0.157 shows that the probability is greater than
the significance level of 0.05, suggesting that the model has homoscedasticity, meaning there is no inequality of variance in the residuals across different observations.

**Autocorrelation Test**
Chi-Square is 0.769, which means it is greater than the significant value of 0.05. So this model avoids autocorrelation and meets the validity criteria. After carrying out the classical assumption test with the results of the ECM model being normally distributed, not finding multicollinearity, heteroscedasticity, and autocorrelation, it can be concluded that the ECM model is suitable for further research, namely hypothesis testing.

**Hypothesis testing**
The t-test was performed to assess the individual impact of each independent variable on the dependent variable, as shown in Table 7.

<table>
<thead>
<tr>
<th>Variable</th>
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<td>0.9871</td>
</tr>
</tbody>
</table>

**F-test (Simultaneous)**
The F-test results reveal a value of 385.459 with a probability level (F-statistic) of 0.000, which is lower than 0.05. By calculating $f = (k; n-k)$, with $k$ as the number of independent variables (4) and $n$ as the number of samples (60), the computed $f$-count value surpasses the $f$-table value of 2.54. Consequently, it can be deduced that the Exchange Rate, Money Supply, Inflation, and BI 7DRR jointly and significantly impact the Net Asset Value (NAV) of Islamic Mutual Funds.

**R² Test (Coefficient of Determination)**
With an R-squared value of 0.965, it indicates that the independent variables, including Exchange Rate, Money Supply, Inflation, and BI 7DRR, can account for approximately 96.58% of the variation in the Net Asset Value (NAV) of Islamic Mutual Funds. The remaining 3.42% suggests that there might be other factors not considered in this study that can influence the NAV of Islamic Mutual Funds.

### 5. Discussion

**The Effect of Exchange Rates on the NAV of Islamic Mutual Funds**
The researcher's first hypothesis posited a positive and significant effect of the exchange rate on the Net Asset Value (NAV) of Islamic Mutual Funds. Nevertheless, the partial test results indicate a t-count value of -0.019, which is smaller than the t-table value of 1.672, with a probability value of 0.984, exceeding 0.05. As a consequence, the partial test does not provide support for the researcher's hypothesis, suggesting that the exchange rate does not have a significant influence on the NAV of Islamic Mutual Funds. These findings are consistent with the research conducted by Karim (2021), which also found no significant effect of exchange rates on the NAV of Islamic Mutual Funds. The study suggests that the stability and reasonableness of the exchange rate during the research period (2016-2020) did not significantly impact investors' decisions to invest in Islamic Mutual Funds. These results contradict the findings of previous studies conducted by Syntia (2021), which found a positive and significant effect of exchange rates on the NAV of Islamic Mutual Funds, as well as contradict the research conducted by Mutiara et al. (2018), which found a negative and significant effect of exchange rates on the NAV of Islamic Mutual Funds.

**The Effect of Money Supply on the NAV of Sharia Mutual Funds**
The researcher's second hypothesis suggests that Money Supply has a positive and significant impact on the Net Asset Value (NAV) of Islamic Mutual Funds. The results of the partial test reveal
a t-count value of 20.521, which exceeds the t-table value of 1.672, and a probability value of 0.0000, which is less than 0.05. As a result, the partial test provides strong support for the researcher's hypothesis, indicating that Money Supply indeed has a positive and significant effect on the NAV of Islamic Mutual Funds. These findings are consistent with previous research conducted by Wirman (2020) and Zaman (2017), which also found a positive and significant effect of Money Supply on the NAV of Islamic Mutual Funds. The study suggests that when Money Supply increases, it leads to higher liquidity and encourages people to invest in productive allocation of funds, leading to a rising trend in stock prices. This increased liquidity and rising stock prices in turn encourage investment in the capital market, including Sharia Mutual Funds, resulting in an increase in the NAV of Sharia Mutual Funds.

**The Effect of Inflation on the NAV of Islamic Mutual Funds**

The researcher's third hypothesis suggests that inflation has a positive and significant impact on the Net Asset Value (NAV) of Islamic Mutual Funds. The results of the partial test indicate a t-count value of 3.964, which surpasses the t-table value of 1.672, and a probability value of 0.0002, which is less than 0.05. These findings support the researcher's hypothesis, demonstrating that inflation does indeed have a positive and significant effect on the NAV of Islamic Mutual Funds. Therefore, the partial test supports the researcher's hypothesis, indicating that inflation partially has a positive and significant effect on the NAV of Islamic Mutual Funds. These findings are consistent with previous research conducted by Setyani & Gunarsih (2018) and Shofia et al. (2018), which also found a positive and significant effect of inflation on the NAV of Islamic Mutual Funds. The study suggests that increased inflation leads to a depreciation of the money supply in society, prompting people to spend on non-primary sectors or luxury goods or invest in non-productive sectors as a way to hoard assets. Rising inflation also increases the total value of Mutual Fund units, leading to an increase in the NAV of Islamic Mutual Funds, making it an attractive investment choice for maintaining the value of money.

**The Effect of BI 7DRR on the NAV of Sharia Mutual Funds**

The fourth hypothesis proposed by the researcher states that BI 7DRR has a negative and significant effect on the NAV of Islamic Mutual Funds. However, the results of the partial test show that the t-count value is -0.016, which is smaller than the t-table value of 1.672, and the probability value is 0.987, which is greater than 0.05. Therefore, the partial test does not support the researcher's hypothesis, indicating that BI 7DRR partially does not have a significant effect on the NAV of Islamic Mutual Funds. These findings align with the results of Rizal et al. (2021), which also found no significant effect of BI 7DRR on the NAV of Islamic Mutual Funds. The study suggests that the absence of influence of BI 7DRR on Islamic Mutual Funds indicates that Sharia investment in the form of Islamic Mutual Funds is free from interest instruments, adhering to the Sharia concept that does not rely on BI 7DRR as a standard of profit, but rather on the contracts attached to the types of mutual funds traded. These results contradict the findings of previous research conducted by Nada (2019) and Nurrahmanawati et al. (2021), which reported a positive and significant effect and a negative and significant effect of BI 7DRR on the NAV of Islamic Mutual Funds, respectively.

**Effect of Exchange Rate, Money Supply, Inflation, and BI 7DRR on the NAV of Islamic Mutual Funds**

The researcher's final hypothesis states that Exchange Rate, Money Supply, Inflation, and BI 7DRR collectively influence Islamic Mutual Funds' NAV. The simultaneous test results show that the f-count value is 385.459, which is greater than the f-table value of 2.54, and the probability level (F-statistic) is 0.000, which is less than 0.05. Therefore, the simultaneous test supports the researcher's hypothesis, indicating that Exchange Rate, Money Supply, Inflation, and BI 7DRR collectively have a significant impact on the NAV of Islamic Mutual Funds.

### 6. Conclusion

The study's findings and discussions lead to several conclusions. Firstly, the Rupiah Exchange Rate (Exchange Rate) does not exert a significant impact on the Net Asset Value (NAV) of
Islamic Mutual Funds. Fluctuations in the exchange rate do not appear to significantly affect the performance of these funds, as investors’ decisions are influenced by other factors. Secondly, Money Supply demonstrates a positive and significant effect on the NAV of Islamic Mutual Funds. An increase in Money Supply results in higher liquidity, encouraging investments in the capital market, including Islamic Mutual Funds, and consequently boosting their NAV. Thirdly, Inflation also exhibits a positive and significant effect on the NAV of Islamic Mutual Funds. As inflation rises, the total unit value of Mutual Funds increases, prompting people to invest in Islamic Mutual Funds to safeguard the value of their money. Fourthly, BI 7DRR does not impact the NAV of Islamic Mutual Funds, indicating that Sharia-compliant investment instruments, such as Islamic Mutual Funds, remain unaffected by the central bank’s interest rate policy. Lastly, the combined influence of the Exchange rate, Money Supply, Inflation, and BI 7DRR significantly affects the NAV of Islamic Mutual Funds, implying that these factors, when considered together, exert a substantial impact on the performance of Islamic Mutual Funds.

Recommendation
Based on the research findings, future researchers are advised to extend the research period to explore more specific aspects of the Net Asset Value (NAV) of Islamic Mutual Funds, such as NAV variations in Equity, Money Market, Fixed, or Protected Income categories. Additionally, there is a suggestion to investigate other related variables that have not been examined in this study. By doing so, researchers can gain a comprehensive understanding of the development of Islamic Mutual Funds in Indonesia from various perspectives. For investors, the study suggests considering investing in Islamic Mutual Funds when inflation and the money supply are increasing. It is recommended to use the rupiah exchange rate (exchange rate), total money supply, inflation, and BI 7DRR as essential inputs or information bases when making investment decisions. This approach can help investors engage in appropriate investment activities and mitigate investment risks effectively.

References


