EFFECT OF RUPIAH EXCHANGE RATE, BI RATE AND MONEY SUPPLY ON THE NET ASSET VALUE OF SHARIA MUTUAL FUNDS
(Empirical Study on Sharia Mutual Funds Registered by the Financial Services Authority in 2016 - 2020)

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Abstract
The purpose of this study is to analyze the effect of Rupiah Exchange Rate, BI Rate and Money in Circulation on the Net Asset Value of Islamic Mutual Funds. This research was conducted on Islamic mutual fund companies registered with the Financial Services Authority (OJK) in the period from 2016 to 2020. The sampling technique used in this study was a time series. This study used a quantitative approach and multiple linear regression analysis methods with SPSS version 25 and Microsoft Excel 2010. The results showed that the Rupiah Exchange Rate (Exchange Rate), BI Rate, and Money Supply simultaneously affected the NAV of Islamic Mutual Funds. The results of this study also show that partially the rupiah exchange rate and BI rate do not affect the NAV of Islamic Mutual Funds, and partially the money supply affects the NAV of Islamic Mutual Funds.

Keywords: Rupiah Exchange Rate, BI Rate, Money Supply, Net Asset Value, Islamic Mutual Funds

1. INTRODUCTION
In recent years, the Indonesian capital market has grown quite rapidly. This dynamism is characterized by the rapid growth of investment activities, and even Islamic mutual fund investments are in high demand on the Islamic capital market. Investment entails investing assets, both in the form of assets and funds, in something that is anticipated to generate income or increase in value in the future (Nopiana et al., 2022). A person invests because he or she is prompted to do so by a number of uncertainties or unanticipated events in life, such as limited funds, health issues, sudden disasters, and investment market conditions (Andesta, 2020).

People invest due to uncertainty and the fact that the unexpected can occur at any time. However, with investment, uncertain future needs can be met. Mutual Fund, which is a forum to collect funds from investors, which will be invested in a securities portfolio, then managed by the investment manager, and the joint property of the investors will be stored and administered by the bank custodian, is one of the increasingly popular investment vehicles (Lestari, 2018).

The net asset value of sharia mutual funds decreased in March 2020 due to market volatility caused by the spread of the corona virus, which increased in the third week of April 2020 (as of April 17). According to the Financial Services Authority (hereinafter referred to as OJK), nearly all types of mutual funds have grown. The types of mutual funds include Islamic stock mutual funds. On April 17, 2020, the NAV of money market mutual funds...
increased by the most, from IDR 6.13 trillion in March to IDR 6.91 trillion. On April 17, 2020, the NAV of Islamic money market mutual funds are higher than the end of 2019 at IDR 6.26 trillion. This was followed by the NAV of Islamic equity mutual funds in December 2019 of IDR 5.8 trillion, which decreased to IDR 4.17 trillion on March 31, 2020, before increasing to IDR 4.35 trillion on April 17, 2020.

Consequently, the NAV of Sharia fixed income mutual funds was IDR 6.09 Trillion in December 2019, IDR 5.68 Trillion in March 2020, and IDR 5.73 Trillion in April 2020. In December 2019 the NAV of sharia mixed mutual funds was IDR 2.52 trillion, in March 2020 it fell to IDR 1.01 trillion, and in April 2020 it rose to IDR 1.03 trillion, representing a significant decline. Bareksa.com (2020).

The rupiah exchange rate is the price of the rupiah relative to foreign currencies. For instance, the exchange rate between the Rupiah and the U.S. dollar. Exchange rates or currency rates are notations (quotations) of the market price of foreign currency in domestic currency or reciprocal, namely the price of domestic currency in foreign currency prices (A. A. Karim, 2017).

It is believed that the exchange rate of the rupiah against the dollar influences the decline in the NAV of equity mutual funds for companies that rely on imports. The effect of a decline in the exchange rate will have a negative impact on companies that rely on the production of imported goods and foreign currencies. Specifically, if there is a decline in the exchange rate, the production costs will increase and the profit earned will decrease, resulting in the capital market stock price plummeting. Additionally, investors reduce their investment activities. On the other hand, the share prices of issuers who are positively affected will rise. Sharp fluctuations in the US dollar exchange rate had a negative impact on some publicly traded companies while having a positive impact on others (Mohamad, 2015).

The rupiah exchange rate is the price of a country's currency relative to the currencies of other nations. The rupiah exchange rate is one of the macro factors that influence the net asset value of sharia mutual funds. The appreciation of the rupiah against the dollar, for instance, will have an effect on the growth of competition for Indonesian exports, particularly in terms of price competition (Chairani, 2020).

Research result of Ilyas & Shofawati (2020) The exchange rate of the Rupiah has an impact on the net asset value of Sharia-compliant mutual funds in Indonesia. While research by Nurjanah et al. (2018) indicates that the rupiah exchange rate has no significant impact on the Net Asset Value of Sharia Mutual Funds, this is not the case.

BI rate is a policy interest rate that reflects the monetary policy stance or stance announced by BI (Miha & Laila, 2017). If the BI rate increases, the issuer's return on loans will also increase, causing the divided return to decrease. Consequently, NAV will decrease. The BI Rate is one of the factors that investment managers consider, particularly in relation to the Net Asset Value (NAV) of Sharia Mutual Funds (Faranayli, 2019).

Interest rates can influence a person's or family's economic decisions regarding consumption. Interest rates can also impact entrepreneurs' decisions to invest in new projects, expand their businesses, or postpone these actions. When interest rates are increased, investors prefer to keep their funds in banks due to the high returns. In contrast, if interest rates are lowered, investors will allocate their capital to more lucrative sectors than banking, such as the capital market. By relocating investors to the capital market, the NAV of capital market-related mutual funds will increase (H. A. Karim & Nurdin, 2021).
Andesta (2020) research indicates that the BI Rate has a significant impact on Net Asset Value. According to the findings of Putra & Arief (2017), the BI rate has no bearing on the net asset value of Islamic mutual funds. According to Setiawan & Qudziyah (2021), there are two commonly understood and applied definitions of money supply: the narrow definition (M1) and the broad definition (M2). In a narrow sense, money supply refers to the total value of currency and demand deposits in the economy, excluding those held in banks. Moreover, in a broad sense, money supply refers to the total value of money in circulation within a community, including currency, demand deposits, and quasi-money (savings and deposits).

Setiawan & Qudziyah (2021) added that the increase and increase in the money supply could have an impact on the company's ability to increase its sources of financing in order to expand its business, thereby enhancing the company's performance. The addition and expansion of the money supply can also result in a price increase for goods and services. This is the result of the decline in the value of the currency as a result of the community's population exceeding the normal limit, which has caused high prices for goods and services.

Research outcome The money supply has a significant impact on the net asset value of sharia mutual funds, according to Setiawan & Qudziyah (2021). While the research findings Zakiyah (2020); Zakariya (2017) The Money Supply have a limited impact on the Net Asset Value of Sharia Mutual Funds, there is no significant impact.

Based on the background, this study aims to analyze the effect of the rupiah exchange rate, bi rate and the amount of money in circulation on the asset value of sharia mutual funds (empirical studies on sharia banking registered with the financial services authority in 2016-2020).

2. THEORETICAL BASIS

The theoretical basis is a collection of definitions, concepts, and hypotheses about the variables in a study that have been arranged neatly and systematically. This theoretical foundation will serve as a solid foundation for future research. As stated by Sugiyono (2018), the theoretical basis must be maintained so that the research has a solid foundation and is not merely an exercise in trial and error.

2.1. Signaling theory

Signaling theory emphasizes the significance of company-issued information to the investment decisions of third parties. Information is a crucial component for investors and businesspeople because it provides information, notes, and descriptions of the past, present, and future conditions of a company's survival and the securities market. Investors require complete, accurate, and timely information as an analytical tool for decision making (Aviva, 2017).

Fitri & Mildawati (2021) explain the implications of signal theory for how a company should communicate with users of financial statements. A signal is a management action that reveals to investors how the management perceives the company's future prospects. The origins of signaling theory can be traced back to pragmatic accounting theory, which focuses on the impact of information on the changes of information users.

The relationship between signaling theory and this study is the signal given by the company through the investment manager in the form of information, which is an essential
element for investors and businesspeople because information presents information, notes, or descriptions for past, present, and future circumstances. The information issued by the company is in the form of financial statements, in which the performance of the company is explained by ratios. Potential investors will receive these signals from investment managers, which will influence their investment decisions and increase investor confidence in the company.

The demand for the Rupiah Exchange Rate will be affected by both the strengthening and weakening of the Exchange Rate. If the demand for the Rupiah Exchange Rate decreases, the issuer will experience a decrease in capital, which will lead to a decline in company performance and a decline in NAV. Interest rates can also impact entrepreneurs' decisions to invest in new projects, expand their businesses, or postpone these actions. If the BI rate increases, the issuer's return on loans will also increase, causing the divided return to decrease. Consequently, NAV will decrease. The expansion and expansion of the money supply can also have an effect on the company's sources of financing, allowing it to expand its business and subsequently improve its performance.

2.2. Sharia Enterprise Theory

Sharia Enterprise Theory or SET is a theory that has been internalized with Islamic values in order to comprehend that the basic actions of human relations with nature and acts of communication in relationships with others as objects are also other basic actions related to human relationships with their creator, and Allah is the primary source because Allah is the sole and absolute owner. In essence, the resources owned by stakeholders are a divine mandate that imposes a duty to use them for God-ordained purposes. Allah is the most important stakeholder, so all sharia accounting practices must emphasize his divinity (Hikmaningsih & Pramuka, 2020).

Sharia enterprise theory is an enterprise theory in which Islamic values have been incorporated, which states that accountability is not only carried out on the company, but also to wider stakeholders which include humans, nature, and Allah, who is the highest party and the only goal of human life because humans must be accountable for all their activities to Allah (Hikmaningsih & Pramuka, 2020).

Sharia enterprise theory is relevant to the variable to be studied in this study, namely sharia mutual funds, because sharia mutual funds represent a form of the responsibility of a fund manager to Allah and a trust holder to Allah, as well as the public as the party managing investor funds in order to generate investor interest in investing.

2.3. Sharia Mutual Funds

Sharia mutual funds according to Syauqiyah (2018) are mutual funds that operate in accordance with the provisions and principles of Islamic sharia, either in the form of a contract between the capital as the owner of the property (sahib al-mal/rabb al-mal) and the investment manager as the representative of the sahib al-mal, as well as between the investment manager as the representative of the sahib al-mal and investment users. Consequently, sharia mutual funds are mutual funds whose investment and management policies adhere to Islamic sharia. Sharia mutual funds will not invest in bonds issued by companies whose management or products contravene Islamic law, such as alcoholic...
beverage factories, pig farming industries, financial services with usury-based operating systems, and businesses with immorality (Soemitra, 2010).

According to Azzahra & Arianti (2021), Sharia-compliant mutual funds are one of the investment vehicles that adhere to different criteria than conventional mutual funds. Sharia mutual funds are investments that pique the public's interest in sharia-compliant investing. In Surah al Imron verses 130 and 131 of the Qur'an, Allah says: "O you who believe, do not eat usury doubled and fear Allah, so that you may be fortunate. And protect yourselves from the hellfire that has been prepared for the unbelievers." The verse explains the prohibition against usury consumption. As a book of guidance, Al-Qur'an is a guide for the lives of Muslims in particular and all humans in general, as the Qur'an contains instructions for life in both this world and the next (Budiman, 2018).

Sharia mutual funds are intermediary institutions that help excess units invest their funds. One of the objectives of sharia mutual funds is to meet the needs of groups of investors who desire investment income from clean, religiously accountable, and sharia-compliant sources and methods.

Some terms that often appear in sharia mutual funds include (Soemitra, 2010):
1) Investment managers are parties whose business activities are managing securities portfolios for customers or managing collective portfolios by investors in mutual funds.
2) Issuers are companies that issue securities to be offered to the public.
3) Securities are securities, namely debt acknowledgments, commercial securities, shares, bonds, debt books, units of participation in collective investment contracts, futures contracts for securities, and any derivatives of securities.
4) Mudharabah or qirad is a contract or system in which a person gives his property to another person to be managed with the proviso that the profits obtained (from the results of the management) are shared between the two parties, while the losses are borne by the sahib al-mal as long as there is no negligence from the mudharib.
5) Prospectus is any written information related to a public offering with the aim of getting other parties to buy securities.
6) Custodian bank is a party whose business activity is to provide custody services for securities and other assets related to securities and other services, including receiving dividends and other rights, completing securities transactions, and representing account holders who are customers.

In 1986, the North American Islamic Trust issued the first Sharia Equity Fund in the form of The Amana Fund, marking the beginning of the international development of sharia mutual funds. Then FTSE International created the FTSE Global Islamic Index Series, followed by IFC World's Finance Corporation Index with ANZ Bank, which later became the benchmark for Islamic Leasing Funds. 1999 saw the formation of the Dow Jones Islamic Market Index (DJIMI), also known as the Dow Jones Islamic Market Index (DJIMI). Then, Malaysia issued $500 million in Malaysia Global Suukok (MGS) bonds, which were listed on the Luxembourg Stock Exchange and the Dubai Islamic Financial Center. Bahrain then issued $100 million worth of Bahrain Monetary Agency-Sukook Al Ijaras, which were issued by the Bahrain Stock Exchange.
Types of Sharia Mutual Funds Sharia mutual funds according to Financial Services Authority (hereinafter referred to as OJK) regulation Number 19/POJK.04/2015 can be in the form of:
1) Money Market Sharia Mutual Funds
2) Fixed Income Sharia Mutual Funds
3) Share Sharia Mutual Funds
4) Mixed Sharia Mutual Funds
5) Protected Sharia Mutual Funds
6) Index Sharia Mutual Funds
7) Foreign Sharia Securities-Based Mutual Funds
8) Sukuk-Based Sharia Mutual Funds
9) Sharia Mutual Funds in the Form of Collective Investment Contracts whose Participation Units are Traded on the Exchange
10) Sharia Mutual Funds in the Form of Limited Participation Collective Investment Contracts.

3. RESEARCH METHOD
3.1. Types of research
This research includes secondary data research. The author employs a quantitative research methodology. According to Sugiyono (2015), quantitative research methods can be interpreted as research methods based on the philosophy of positivism that are used to examine specific samples and populations, whereas data collection is accomplished through the use of the research instrument. The objective of the quantitative or statistical data analysis is to test hypotheses that have been predefined.

3.2. Place and time of research
The location of the researcher's research was Sharia Mutual Funds Registered with the Financial Services Authority. According to Sugiyono (2010: 24), there is no simple method for estimating the duration of a research project. Nonetheless, the duration of the research will depend on the availability of data sources and the research objectives. Additionally, it will depend on the scope of the research and how efficiently the time is managed. This study has been ongoing since September 2021. The schedule for research is as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>activities</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Des</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Submission of Proposal Title</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>Proposal</td>
<td></td>
<td>✔</td>
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<tr>
<td>3.</td>
<td>Data collection</td>
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<tr>
<td>4.</td>
<td>Data analysis</td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
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</tr>
<tr>
<td>5.</td>
<td>Interpretation of Results and Conclusions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Source: Data processed by the author, 2022
4. RESULT AND DISCUSSION

4.1. Result

4.1.1. Descriptive Statistics

This study employs a statistical method of data analysis that employs multiple regression equations. The dependent variable is the Net Asset Value of Sharia Mutual Funds, and descriptive statistics are used to display the maximum value, minimum value, average value, and standard deviation of the independent variables including the Rupiah Exchange Rate, Bi Rate, and Money Supply.

Table 2 Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rupiah exchange rate</td>
<td>60</td>
<td>12998.0000</td>
<td>16367.0000</td>
<td>13951.06667</td>
<td>648.3697906</td>
</tr>
<tr>
<td>BI Rate</td>
<td>60</td>
<td>3.7500</td>
<td>7.2500</td>
<td>5.108333</td>
<td>0.8870140</td>
</tr>
<tr>
<td>Amount of Money Supply</td>
<td>60</td>
<td>4498361</td>
<td>6905939</td>
<td>5558575</td>
<td>65242</td>
</tr>
<tr>
<td>Sharia Mutual Fund NAV</td>
<td>60</td>
<td>9061.0200</td>
<td>74367.4400</td>
<td>34265.329500</td>
<td>19682.8121168</td>
</tr>
</tbody>
</table>

Source: Output SPSS Version 25, processed by the author (2022)

Table 2 above shows the results of descriptive statistical calculations for each variable, obtained as many as 60 data samples which will be explained as follows:

1) Rupiah exchange rate

The results of the descriptive statistical test in Table 1 show that the Rupiah Exchange Rate has the lowest value of 12998 in September 2016 and the highest value of 16367, the average value (mean) of 13951 in May 2018, and the standard deviation value of 648. The standard deviation value which is smaller than the mean value indicates good data variation.

2) BI Rate

The results of the descriptive statistical test in Table 1 show that the BI Rate value. The lowest value is 3.7500 in November and December 2020 and the highest value is 7.2500 in January 2016. The average value (mean) is 5.108333 and the standard deviation value is 0.8870140. A standard deviation value that is smaller than the mean value indicates that the data variation is not good or bias and the data are heterogeneous or diverse.

3) Amount of Money in circulation

The results of the descriptive statistical test in Table 1 show that the value of the Amount of Money in circulation has the lowest value of 4498361 in January 2016 and the highest value of 6905939 in December 2020. The average value (mean) is 5558575 and the standard deviation value is 65242. a standard deviation that is greater than the mean value indicates that the data is unfavorable or biased and the data is heterogeneous or diverse.
4) Sharia Mutual Fund NAV

The results of the descriptive statistical test in Table 2 show that the NAV value of Islamic Mutual Funds has the lowest value of 9061 in February 2016 and the highest value of 74367 in December 2020. The average value (mean) is 34265 and the standard deviation value is 19682. The standard value a deviation that is smaller than the mean value indicates good data variation.

4.1.2. Classic assumption test

The results of the classical assumption test are intended to obtain a valid and unbiased regression model. The classical assumption test of this study consists of normality test, multicollinearity test, heteroscedasticity test and autocorrelation test.

1) Normality test

Normality test aims to test whether the regression model, confounding variable or residual has a normal distribution. There are two ways to detect whether the residuals are normally distributed or not, namely by statistical tests and graph analysis.

a) Kolmogrov – Swirnow test to see whether the residual value is normally distributed or not with a significance value of \(= 0.05\%\)

- If the significant value < 0.05 then the data distribution is not normal.
- If the significant value is > 0.05 then the normal data distribution of the hypothesis is used:
  - \(H_0\) : residual data is normally distributed.
  - \(H_0\) : residual data is not normally distributed.

<table>
<thead>
<tr>
<th>Table 3 One-Sample Kolmogorov-Smirnov Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Sample Kolmogorov-Smirnov Test</td>
</tr>
<tr>
<td>Unstandardized Residual</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters, b</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>negative</td>
</tr>
<tr>
<td>Test Statistics</td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td>a. Test distribution is Normal.</td>
</tr>
<tr>
<td>b. Calculated from data.</td>
</tr>
<tr>
<td>c. Lilliefors Significance Correction.</td>
</tr>
<tr>
<td>d. This is a lower bound of the true significance.</td>
</tr>
</tbody>
</table>

Source: Output SPSS Version 24, processed by the author (2022)

Based on Table 3 above, the One Sample Kolmogorov-Smirnov test can be seen from the Asymp value. Sig (2-tailed ) which is the value of Asymp. Sig (2-tailed) 0.200 which means > from 0.05 then the distribution of the test data is normal. So H0 is accepted.
b) Histogram, this test is carried out using the condition that normal data is in the form of a bell. Good data is data that has a normal distribution pattern. If the data is skewed to the right and skewed to the left, it means that the data is not normally distributed.

Source: Output SPSS Version 25, processed by the author (2022)

**Figure 1** Histogram Graph Normality Test Results

From the histogram above, we can see that the curve does not deviate, and we can conclude that the data is normally distributed. This is indicated by the distribution of data that does not deviate to the left or right.

c) The graph method used in this study is to look at the normal probability plot. Normal Probability Plot is to compare the cumulative distribution of the normal distribution (Ghozali, 2011). The basis for decision making through this analysis, if the data spreads around the diagonal line as a representation in a normal distribution, it means that the regression model meets the assumption of normality. Normality Probability Plot graph, the conditions used are:

a. If the data spreads around the diagonal line and follows the direction of the diagonal line, the regression model meets the assumption of normality.

b. If the data spreads far from the diagonal and/or does not follow the direction of the diagonal line, the regression model does not meet the assumption of normality.
Based on the results of the normality test, it can be concluded that the data spreads around the diagonal line and follows the direction of the diagonal line, so the regression model meets the assumption of normality.

2) 4.1.2.2. Multicollinearity Test
The multicollinearity test aims to determine whether the independent variables in a regression model are correlated (independent). A quality regression model should lack a correlation between the independent variables. To determine the presence or absence of multicollinearity in the regression, the Tolerance and Variance Inflation Factor (VIF) values can be used.
VIF > 10, then multicollinearity is suspected.
VIF < 10, then there is no multicollinearity.

Table 4 Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rupiah exchange rate</td>
<td>.401</td>
<td>2.496</td>
<td></td>
</tr>
<tr>
<td>BI Rate</td>
<td>.631</td>
<td>1.584</td>
<td></td>
</tr>
<tr>
<td>Amount of Money Supply</td>
<td>.305</td>
<td>3.275</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sharia Mutual Fund NAV

Source: Output SPSS Version 25, processed by the author (2022)
Based on the test results above, the Tolerance value of the Rupiah Exchange Rate is 0.401 and the VIF value is 2.496, the Tolerance value of the BI Rate is 0.631 and VIF value 1.584. And obtained the Tolerance value of the Money Supply of 0.305 and the VIF value of 3.275 from these results it can be concluded that VIF < 10 which means that there is no multicollinearity in multiple linear regression.

3) Heteroscedasticity Test

Heteroscedasticity test is the occurrence of variance inequality from the residual of one observation to another observation. To test the presence or absence of heteroscedasticity, this study used a graph plot between the predicted value of the dependent variable (ZPRED) and the residual (SRESID). The basis of the analysis is that if there is no clear pattern and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity.

Source: Output SPSS Version 25, processed by the author (2022)

Figure 3 Heteroscedasticity Test Results

In Figure 4.3 it can be seen that the points are spread out and do not form a certain clear pattern so that it can be concluded that there is no heteroscedasticity problem.

4) Autocorrelation Test

The autocorrelation test aims to determine whether the confounding error in period t and the error in period t-1 are correlated in a linear regression model (previous). A good regression model is one that is autocorrelation-free or in which autocorrelation does not exist. According to Danang Sunyoto (2013: 98), one method for determining whether there is an autocorrelation problem is the Durbin Watson (DW) test under the following conditions:

a) There is a positive autocorrelation, if the DW value is below -2 (DW < -2).

b) There is no autocorrelation, if the DW value is between -2 and +2 or -2 < DW < +2.

c) There is a negative autocorrelation if the DW value is above +2 or DW > +2.
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Table 4 Autocorrelation Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.978a</td>
<td>0.957</td>
<td>0.955</td>
<td>4195.2259697</td>
<td>0.649</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Money Supply, BI Rate, Rupiah Exchange Rate  
b. Dependent Variable: Sharia Mutual Fund NAV

Source: SPSS version 25 output, edited by the author, (2022)

Based on the "Model Summary" output table above, it is known that the Durbin-Watson (DW) value is 0.649. The value is between -2 and +2 or -2 < 0.649 < +2, which means that there is no autocorrelation between the value of the variable itself. Thus the autocorrelation test is fulfilled.

4.1.3. Multiple Regression Analysis

Multiple Linear Regression Analysis is used to determine the relationship between the independent variable and the dependent variable, namely between the exchange rate, bi rate, and the amount of money in circulation on the net asset value of Islamic mutual funds.

Table 5 Multiple Regression Analysis Results

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-118347.828</td>
<td>13119.450</td>
<td>-9.021</td>
</tr>
<tr>
<td>Rupiah exchange rate</td>
<td>-1.848</td>
<td>1.331</td>
<td>-.061</td>
</tr>
<tr>
<td>BI Rate</td>
<td>801.159</td>
<td>774.968</td>
<td>.036</td>
</tr>
<tr>
<td>Amount of Money Supply</td>
<td>.031</td>
<td>.002</td>
<td>1.039</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Sharia Mutual Fund NAV

Source: SPSS version 25 output, processed by the author, (2022)

From the results of the Multiple Linear Regression research above, it is obtained $Y = -118347.1.848+801+.031+e$ where the results of the interpretation of the regression are as follows:

1) The constant (a) of -118347 means that if there are no independent variables, namely the rupiah exchange rate, BI Rate and the amount of money in circulation. Or it is considered 0 then the NAV of Sharia Mutual Funds will decrease because the negative value of NAV of Sharia Mutual Funds itself is 118347.

2) The coefficient value of the rupiah exchange rate is 1,848 and is marked negative, this means that for every increase in the rupiah exchange rate one unit, the NAV variable for Sharia Mutual Funds will decrease by 1,848 with the assumption that the other independent variables of the regression model are fixed.

3) The BI Rate coefficient value is 801 and is marked Positive, this means that for every one unit increase in the BI Rate, the Sharia Mutual Fund NAV variable will increase by
801 with the assumption that the other independent variables from the regression model are fixed.

4) The coefficient value of the Amount of Money in circulation is 0.031 and is marked Positive, this means that for every increase in the dividend policy of one unit, the NAV variable for Sharia Mutual Funds will increase by 0.031 with the assumption that the other independent variables of the regression model are fixed.

4.1.4. Hypothesis testing

1) Individual Parameter Significant Test (T-test)

The basis for decision making on the partial t test in Regression Analysis. Based on the significance value (Sig)

\[ a) \text{If the significance value (Sig) < probability 0.05, then there is an effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.} \]

\[ b) \text{If the significance value (Sig) > 0.05 probability then there is no effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.} \]

Based on the comparison of t-statistic with \( t_{table} \)

\[ a) \text{If the value of t-statistic} < \text{t}_{table} \text{ then there is an influence of the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted.} \]

\[ b) \text{If the value of t-statistic} > \text{t}_{table} \text{ then there is no effect of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.} \]

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients B</th>
<th>Unstandardized Coefficients Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>-118347.828</td>
<td>13119.450</td>
<td>-9.021</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Rupiah exchange rate</td>
<td>-1.848</td>
<td>1.331</td>
<td>-0.61</td>
<td>-1.389</td>
<td>.170</td>
</tr>
<tr>
<td>BI Rate</td>
<td>801.159</td>
<td>774.968</td>
<td>0.036</td>
<td>1.034</td>
<td>.306</td>
</tr>
<tr>
<td>Amount of Money Supply</td>
<td>.031</td>
<td>.002</td>
<td>1.039</td>
<td>20.699</td>
<td>.000</td>
</tr>
</tbody>
</table>

\[ a. \text{Dependent Variable: Sharia Mutual Fund NAV} \]

Source: Output SPSS Version 25, processed by the author (2022)

From the results of the t-statistical test, the influence of each variable Rupiah Exchange Rate, BI Rate and Total Money Supply on the net asset value of Sharia Mutual Funds can be described as follows:

a) In the Independent Rupiah Exchange Rate t-test partially obtained t-statistic value of -1,389 t-statistic < \( t_{table} \) or 2.00030 greater -1,389 with a significant value of 0.170 greater probability 0.05 then H1 is rejected, it can be concluded that the Rupiah Exchange Rate has no significant effect to the net asset value of Sharia Mutual Funds.

b) In the BI Rate Independent t-test partially, the t-statistic value is 1.034, the t-statistic < \( t_{table} \) or 2.00030 greater than 1.034 with a significant value of 0.306 greater probability of 0.05 then H2 is rejected, it can be concluded that the BI Rate has no significant effect on the net asset value of Islamic Mutual Funds.
c) In the Independent Money Supply, the t-test partially obtained a t-statistic of 20.699, the value of t-statistic > t_{table} or 2.00030 smaller than 20.699 with a significant value of 0.000 with a smaller probability of 0.05 then H3 is accepted, it can be concluded that the Independent Money Supply has a significant effect on the net asset value of Islamic Mutual Funds.

2) Simultaneous Parameter Significant Test (F Test)
   This test is used to determine whether the independent variables influence the dependent variable together. In order to reach a conclusion regarding the simultaneous F test, it is possible to examine the significance at the 0.05 level of confidence using the criteria. The variable of auditor quality has a positive effect on earnings management, it can be concluded.
   a) If F-statistic > F_{table} then the hypothesis is accepted
   b) If F-statistic < F_{table} then the hypothesis is rejected

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>21871776904.145</td>
<td>3</td>
<td>7290592301.38</td>
<td>414,240</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>98559572.473</td>
<td>56</td>
<td>17599920.937</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22857372476.618</td>
<td>59</td>
<td>17599920.937</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of the simultaneous significant F test, it is known that the F-statistic value is 414.240 > 2.76 so H4 is accepted. A significant value of 0.000 indicates that the significant value is less than 0.05 or (0.00 < 0.05) then the Rupiah Exchange Rate, BI Rate and Total Money Supply simultaneously have a significant effect on the net asset value of Islamic Mutual Funds.

3) Coefficient of Determination Test
   The simple correlation coefficient (r) is the root of the determinant coefficient, the magnitude of the relationship between one variable and another variable is expressed by the correlation coefficient which is symbolized by the letter Y. This analysis is used to determine the relationship between two or more independent variables on the dependent variable (Y) simultaneously. The value of R ranges from 0 to 1, the value closer to 1 means the relationship is getting stronger, on the contrary the value is getting closer to 0 then the relationship is getting weaker.
Based on Table 8, the R-Square serves to measure how big the confidence level of adding the right independent variable is to increase the predictive power of the value model. R-Square obtained 0.955 or 95.5%, meaning that the net asset value of Sharia Mutual Funds is influenced by three independent variables, namely the Rupiah Exchange Rate, BI Rate and the Money Supply on the net asset value of Sharia Mutual Funds by 95.5%, while the other 4.5% is influenced by variables outside independent variable.

4.2. Discussion

4.2.1. Partial Influence of the Rupiah Exchange Rate on the Net Asset Value of Sharia Mutual Funds

In the Independent Rupiah Exchange Rate t-test partially obtained t-statistic value of 1.389 t-statistic < t_{table} or 2.00030 greater -1.389 with a significant value of 0.170 greater probability 0.05 then H1 is rejected, it can be concluded that the Rupiah Exchange Rate has no significant effect on the net asset value of Sharia Mutual Funds.

The Rupiah Exchange Rate has no significant effect on the net asset value of Islamic Mutual Funds. This means that the fluctuation of the USD exchange rate does not affect the interest of investors to invest their funds in mixed mutual fund instruments. The depreciation of the rupiah was not followed by changes in the investment portfolio, especially investment in mutual funds. It is possible that mutual fund investors do not consider the return from the exchange rate when investing in mixed mutual funds. Thus, when the rupiah changes in exchange rates (against USD in particular), it does not affect investors.

The results of this study are in line Nurjanah et al. (2018) that the rupiah exchange rate has no significant effect on the Net Asset Value of Islamic Mutual Funds. While the research results are not in line Ilyas & Shofawati (2020) The Rupiah exchange rate partially has a significant effect on the net asset value of Sharia protected mutual funds in Indonesia.

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

In the BI Rate Independent t-test partially, the t-statistic value is 1.034, the t-statistic < t_{table} or 2.00030 greater than 1.034 with a significant value of 0.306 greater probability of 0.05 then H2 is rejected, it can be concluded that the BI Rate has no significant effect on the net asset value of Islamic Mutual Funds.

The BI Rate has no significant effect on the net asset value of Islamic Mutual Funds. This means that when the BI rate decreases, investors are not interested in saving their funds.
in the bank, because the interest is relatively large and the profits from the interest are long, namely waiting for a year.

Research results are in line with Putra & Arief (2017) that the BI rate has no effect on the net asset value of Islamic mutual funds. While the results of this study are not in line with Andesta (2020) that BI Rate significant effect on Net Asset Value.

4.2.3. Partial Influence of the Money Supply on the Net Asset Value of Sharia Mutual Funds

In the Independent Money Supply, the t-test partially obtained a t-statistic of 20.699, the value of t-statistic $t_{table}$ or 2.00030 smaller than 20.699 with a significant value of 0.000 with a smaller probability of 0.05 then H3 is accepted, it can be concluded that the Independent Money Supply has a significant effect on the net asset value of Islamic Mutual Funds.

The amount of independent money supply has a significant effect on the net asset value of Islamic mutual funds. This means that an increase in the money supply will encourage additional sources of financing for the company so that the company can expand its business more broadly which ultimately improves the company's performance. Increased company performance will stimulate investors to look at the company's shares so that it has a positive impact on stock prices.

The results of this study are in line with those carried out by Setiawan & Qudziyah (2021) the money supply has a significant effect on the net asset value of sharia mutual funds. While the results of this study are not in line with those carried out by Zakiyah (2020) The Money Supply partially has no effect on the Net Asset Value of Sharia Mutual Funds.

4.2.4. The influence of the Rupiah Exchange Rate, BI Rate and the Money Supply simultaneously has a significant effect on the net asset value of Sharia Mutual Funds

Based on the results of the simultaneous significant F test, it is known that the F-statistic value is $F = 414.240 > 2.76$ so H5 is accepted. A significant value of 0.000 indicates that the significant value is less than 0.05 or (0.00 <0.05) then the Rupiah Exchange Rate, BI Rate and Total Money Supply simultaneously have a significant effect on the net asset value of Islamic Mutual Funds.

This means that if the rupiah exchange rate increases, the demand for shares will increase because many investors buy company shares so that the share price also increases. Increased profitability which has a positive impact on stock prices will cause the NAV of mutual funds to increase, because the investment portfolio of mutual funds is in the form of shares.

It's means that from the investor's point of view, the BI rate is the driving force for investment. This movement can strengthen investment when the BI rate decreases so that all investment is diverted to the capital market. Along with that, the company's performance will increase so that the share value also increases, this has an impact on the Net Asset Value (NAV) also increases.

This means that when the government and the central bank increase the Money Supply in the community, the public is considered to have more proportions to invest so that the demand for investment instruments increases which means it will increase the NAV of Sharia Mutual Funds and vice versa.
Research result Andesta (2020) that the rupiah exchange rate and the BI rate have a significant effect on the net asset value of Islamic Mutual Funds. And research results Lestari (2018) that the amount of money in circulation has a significant effect on the net asset value of Islamic mutual funds.

5. CONCLUSION

5.1. Conclusion

Based on the results of analytical research and also based on the data obtained, the conclusions of this study are:

1) The Rupiah exchange rate does not have a significant effect on the net asset value of Islamic Mutual Funds, because the development of the rupiah exchange rate during that period is still relatively stable and reasonable, so it does not have much impact on investors’ decisions in making investment decisions. Likewise, it is also possible that mutual fund investors do not consider the return from the exchange rate when investing in mutual funds. Thus, when the rupiah changes in exchange rates (against USD in particular), it does not affect investors.

2) The BI Rate has no significant effect on the net asset value of Sharia Mutual Funds, because when the BI rate increases, investors are not interested in saving their funds in the bank, due to the relatively large interest and the benefits of the interest being long, namely waiting for a year.

3) The amount of independent money supply has a significant effect on the net asset value of Islamic mutual funds, because an increase in the money supply will encourage additional sources of financing for the company so that the company can expand its business wider which ultimately improves the company's performance. Increased company performance will stimulate investors to look at the company's shares so that it has a positive impact on stock prices.

4) The Rupiah Exchange Rate, BI Rate and Total Money Supply simultaneously have a significant effect on the net asset value of Islamic Mutual Funds, because the value of the f-statistical test shows that F-statistic > Ftable (414,240 > 2.76) so that H4 is accepted.

5.2. Research Limitations

Based on the results of data processing, this research has limitations which are as follows:

1) This study only uses a sample of sharia mutual funds registered with the Financial Services Authority for the period January 2016 – December 2020.

2) This study only uses three variables, namely the rupiah exchange rate, the BI Rate and the amount of money in circulation.
5.3. Suggestions

Based on the conclusions obtained, the authors would like to provide suggestions for interested parties, namely as follows:

1) For Investors
   This research can be used by investors as a reference in carrying out the right strategy in investing in Islamic mutual funds. In addition, this research can also be a consideration for the community in carrying out their economic activities.

2) For Academics
   This research will add to the literature in the field of capital markets, especially in sharia mutual fund products and can be used as reading material to add insight and knowledge. For further researchers, it is better to increase the number of variables, for example: Gross Domestic Product (GDP), SBI Interest Rate, Composite Stock Price Index (CSPI), Sharia Index (Jakarta Islamic Index), and others.

3) For Companies
   This research is expected to be used as consideration in determining investment policies in each sharia mutual fund company to improve company performance and can be used as an evaluation tool for its performance so far.
REFERENCES


THAHA SAIFUDDIN JAMBI.