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THE EFFECT OF MACROECONOMIC VARIABLES ON MUDHARABAH DEPOSITS AT BANK MUAMALAT INDONESIA FOR THE PERIOD 2014-2024

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Abstract
This study aims to analyze the effect of inflation, exchange rate, interest rate, and gross domestic product (GDP) on Mudharabah deposits at Bank Muamalat Indonesia during the period 2014–2024. Macroeconomic stability is a crucial factor influencing public investment decisions in Islamic banking products. This research employs a descriptive quantitative approach using secondary data, including quarterly financial reports of Bank Muamalat, inflation, exchange rate, and interest rate data from Bank Indonesia, as well as GDP data from the Central Bureau of Statistics. The analysis is conducted using multiple linear regression with EViews 12. The results indicate that simultaneously, inflation, exchange rate, interest rate, and GDP significantly affect Mudharabah deposits. Partially, inflation, exchange rate, and GDP have a positive effect, while the interest rate is not significant. These findings provide valuable insights for bank management in designing profit-sharing strategies and maintaining depositor confidence, as well as assisting regulators in formulating policies that are adaptive to macroeconomic conditions

Abstrak
Penelitian ini bertujuan untuk menganalisis pengaruh inflasi, kurs, suku bunga, dan produk domestik bruto terhadap deposito Mudharabah pada Bank Muamalat Indonesia periode 2014-2024. Stabilitas makroekonomi menjadi faktor penting dalam pengambilan keputusan investasi masyarakat pada produk perbankan syariah. Penelitian ini menggunakan pendekatan kuantitatif deskriptif dengan data sekunder berupa laporan keuangan triwulan Bank Muamalat, data inflasi, kurs, dan suku bunga dari Bank Indonesia, serta data produk domestik bruto dari Badan Pusat Statistik. Analisis dilakukan menggunakan regresi linier berganda dengan bantuan EViews 12. Hasil penelitian menunjukkan bahwa secara simultan, inflasi, kurs, suku bunga, dan produk domestik bruto berpengaruh signifikan terhadap deposito Mudharabah. Secara parsial, inflasi, kurs, dan produk domestik bruto berpengaruh positif, sedangkan suku bunga tidak signifikan. Temuan ini memberikan informasi penting bagi manajemen bank dalam merancang strategi profit-sharing dan menjaga kepercayaan nasabah, serta membantu regulator merumuskan kebijakan yang adaptif terhadap kondisi makroekonomi.

Kata kunci: Inflasi, Kurs, Suku Bunga, Produk Domestik Bruto, Deposito Mudharabah, Bank Syariah

INTRODUCTION

Islamic banking in Indonesia has experienced rapid development since the establishment of Bank Muamalat Indonesia (BMI) in 1991, which commenced operations in 1992 as a pioneer in implementing a Sharia-based financial system in the country. The legal foundation of Islamic banking has been further strengthened through Law Number 10 of 1998, and subsequently refined by Law Number 21 of 2008, providing institutional legitimacy and enabling growth opportunities for the national Islamic finance industry (Otoritas Jasa Keuangan, 2024). Despite this regulatory support, Islamic banks remain highly sensitive to macroeconomic dynamics that influence public saving and investment behavior.

By 2024, there were 13 active Islamic Commercial Banks and 20 Islamic Business Units operating in Indonesia. Among these institutions, Bank Syariah Indonesia (BSI) occupies the largest position with total assets of approximately IDR 319.84 trillion, while BMI holds total assets of IDR 66.19 trillion (*Bank Muamalat Indonesia*, 2024). As the first Islamic bank, BMI plays a strategic role in shaping public perception and trust in the Islamic financial system. Therefore, analyzing BMI provides a unique empirical context due to its historical role, market positioning, and resilience across economic cycles.

During the 2014–2024 period, BMI's financing distribution increased from IDR 5.91 trillion to IDR 6.97 trillion. Third-party fund collection products, particularly Mudharabah deposits, exhibited significant annual fluctuations. Mudharabah deposits differ from conventional deposits because they are profit-sharing based agreements between fund owners (shahibul maal) and fund managers (mudharib), with returns linked to actual business performance (Karim, 2020; Mulyadi, 2021). Therefore, macroeconomic variables such as inflation, interest rates, exchange rates, and gross domestic product (GDP) are expected to influence public interest in placing funds in this instrument. This linkage suggests that Mudharabah deposits are not only financial instruments but also reflect macroeconomic expectations and confidence levels.

Table 1. Macroeconomic Variables and Mudharabah Deposits, 2014-2024

Year	Inflation (%)	Exchange Rate (IDR)	Interest Rate (%)	GDP (Billion IDR)	Mudharabah Deposits (Million IDR)
2014	8,36	12.440	7,75	2.161.552,50	8.031.207
2015	3,35	13.795	7,50	2.272.929,20	282.597
2016	3,02	13.436	4,75	2.385.186,80	1.070.292
2017	3,61	13.548	4,25	2.508.971,90	271.771
2018	3,13	14.481	6,00	2.638.969,60	432.456
2019	2,72	13.901	5,00	2.769.748,10	151.876
2020	1,68	14.105	3,75	2.709.721,70	3.111.474
2021	1,87	14.278	3,50	2.846.056,90	2.670.754
2022	5,51	15.592	5,50	2.988.548,90	2.238.744
2023	2,61	15.439	6,00	2.961.539,50	3.130.505
2024	3,05	15.873	6,00	3.112.906,10	3.443.765

Source: Bank Indonesia dan Bank Muamalat Indonesia, 2025.

The data in the table indicate that the decline in Mudharabah deposits in 2015 and 2017 was due to depositors' sensitivity to macroeconomic conditions, including low inflation, a strengthening exchange rate, and stable interest rates, which affected risk perception and expected returns(Ludeen & Masih, n.d.). Conversely, the surge in deposits during 2020–2024 reflects a positive response from customers to economic stability and monetary policies that support Islamic banks(Che Arshad & Nurfadilah, 2017). These fluctuations highlight the importance of examining macroeconomic impacts at the institutional level rather than using aggregated industry data.

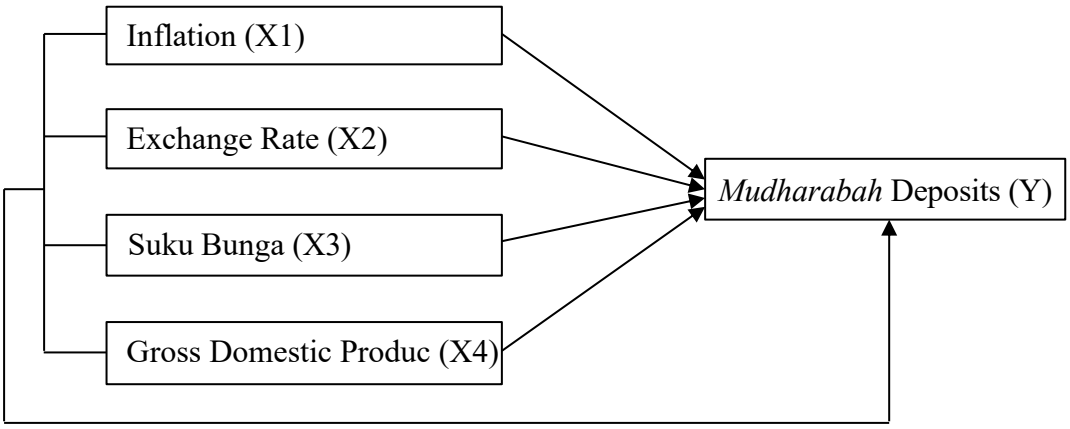
Previous studies have emphasized the importance of efficiency and internal governance in Islamic banks for fund mobilization performance. Research in Aceh indicates that the technical efficiency of BPRS still depends on macroeconomic stability and risk management capability (Kismawadi et al., 2017), whereas international studies highlight that dual management and agency cost control can strengthen public trust and the competitiveness of the Islamic banking industry(Mollah et al., 2023). However, most existing studies focus on cross-country analysis or aggregated Islamic banking

sectors, leaving limited evidence at the individual bank level over a long observation period.

From a behavioral finance perspective, customers' saving decisions are influenced by risk perception and expected return (Shefrin, 2016). Compliance with Shariah principles and considerations of fairness (*adl*) also constitute important moral factors (Lailiya & Kusumaningtias, 2024). The variation in previous research findings regarding the effects of exchange rates, inflation, interest rates, and GDP on Mudharabah deposits indicates an empirical gap, motivating more in-depth research at the level of individual banking institutions such as BMI (Che Arshad & Nurfadilah, 2017; Ludeen & Masih, n.d.). Accordingly, this study seeks to fill the empirical gap by specifically examining the long-term impact of macroeconomic variables on Mudharabah deposits at Bank Muamalat Indonesia during the 2014–2024 period.

Accordingly, this study contributes to the literature on Islamic banking by demonstrating how key macroeconomic variables, such as inflation, interest rates, exchange rates, and gross domestic product, simultaneously influence Mudharabah deposits. By focusing on Bank Muamalat as a pioneer and representative of Indonesian Islamic banks, this study provides a unique and nationally relevant empirical context. Furthermore, the study offers deeper insights into depositor behavior and fund mobilization strategies employed by the bank, thereby delivering practical implications for bank management and regulatory policy in designing deposit products that are adaptive to economic conditions while maintaining public trust in the Islamic financial system.

Figure 1. Conceptual Framework



Source: Data processed by the author, 2025.

RESEARCH METHOD

This study employs a descriptive quantitative approach to examine the influence of macroeconomic variables on Mudharabah deposits at Bank Muamalat Indonesia. This approach was selected because it systematically describes real conditions while providing quantitative information regarding the relationships between inflation, exchange rate, interest rate, and Gross Domestic Product (GDP) on customer investment decisions(Mulyadi, 2021; Sugiyono, 2022). A similar approach was applied by (Hasan & Susanto, 2020) in their study on the performance of Islamic banking in Indonesia. The descriptive quantitative approach is considered appropriate as it allows for empirical validation of macroeconomic impacts without altering the natural behavior of financial data.

The research was conducted at Bank Muamalat, with the primary subjects being quarterly financial reports from 2014 to 2024. The unit of analysis is Mudharabah deposit data influenced by inflation, exchange rate, interest rate, and GDP, while the purposive sample comprised 41 quarterly reports representing economic conditions and bank performance(Arikunto, 2013; Munandar, 2017). The use of quarterly data enables the study to capture short-term economic fluctuations and policy responses that may not be observable in annual data.

The data sources were obtained from official publications: inflation, exchange rate, and interest rates from Bank Indonesia; GDP from the Central Bureau of Statistics (BPS); and Mudharabah deposits from Bank Muamalat's financial statements. The analysis also considered the influence of bank governance on efficiency and Islamic banking performance (Ahmed & Haron, 2023). Secondary data were selected due to their objectivity, consistency, and reliability, as they are compiled by authoritative institutions and widely used in empirical banking research.

The dependent variable in this study is Mudharabah deposits, while the independent variables include inflation, exchange rate, interest rate, and GDP. Operational definitions were clearly established to ensure measurement consistency and reliability. This variable specification allows for a focused assessment of macroeconomic transmission mechanisms affecting Mudharabah deposit behavior at the institutional level.

Table 2. Operationalization of Variables

Variable	Operational Definition	Measurement
Inflation (X1)	Continuous change in general price level	$\text{Inflation} = \frac{\text{CPIn} - \text{CPIn} - 1}{\text{CPIn} - 1 \times 100\%}$ IHKn = Index Harga Konsumen
Exchange Rate (X2)	Comparison of Rupiah against foreign currencies	$MER = \frac{\text{Selling Rate} + \text{Buying Rate}}{2}$
Interest Rate (X3)	Bank compensation to depositors after adjusting for inflation	$\text{RIR} = \frac{\text{Nominal Interest Rate}}{\text{Inflation Rate}}$
Gross Domestic Product (X4)	Total value of final goods and services produced by all economic units	$\text{GDP} = C + I + G\ (X - M)$ Gross Domestic Product, C = Konsumsi, I = Investasi, G = Pemerintah, X = Ekspor, M = Impor
Mudharabah Deposits (Y)	Deposits with withdrawal at an agreed time by depositors	$\text{MDR} = \frac{\text{Total Deposito Mudharabah}}{Total\ Simpanan \times 100\%}$

Source: Data processed by the author, 2025.

Data analysis was conducted using a multiple linear regression model to examine the influence of each independent variable on Mudharabah deposits both partially and simultaneously. The regression equation used is as follows:

$$Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$$

Where:

Y = Mudharabah Deposits

α = Constant

β = Regression Coefficient

X_1 = Inflation

X_2 = Exchange Rate

X_3 = Interest Rate

X_4 = Gross Domestic Product (GDP)

β_{1234} = Coefficients for independent variables

ε = Residual Error

Data processing was performed using Econometric Views (EViews) version 12, including descriptive analysis, classical assumption tests (normality, multicollinearity, heteroscedasticity, autocorrelation), and hypothesis testing using the t-test, F-test, and

coefficient of determination (R^2) to evaluate the partial and simultaneous effects of the independent variables on the dependent variable(Ghozali, 2022; Priyatno, 2020). The application of classical assumption tests ensures the robustness and validity of the regression estimates, thereby reducing potential bias in parameter interpretation.

Using this method, the study is expected to provide a comprehensive understanding of the influence of macroeconomic conditions on Mudharabah deposits at Bank Muamalat. Additionally, it provides insights for the bank in setting competitive profit-sharing ratios and for customers in considering macroeconomic factors before making investment decisions. This methodological framework strengthens the empirical contribution of the study by offering institution-specific evidence over a long observation period.

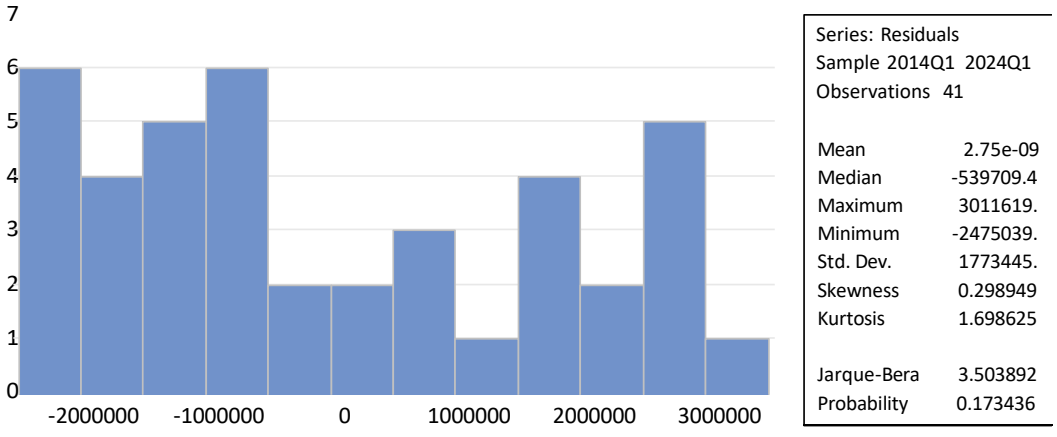
RESULTS AND DISCUSSION

Classical Assumption Tests

Normality Test

The normality test aims to assess whether the residuals in the regression model are normally distributed. This test is essential to ensure that the classical assumptions underlying the validity of the regression model are met, as deviations from a normal distribution can affect estimation results. A commonly used method is the Jarque-Bera (JB) test, which measures the difference between skewness and kurtosis values relative to a normal distribution(Wooldridge, 2022).

Figure 2. Normality Test Results



Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 2, the Jarque-Bera probability value is 0.173436, which is greater than the significance level of 0.05. Therefore, it can be

concluded that the residuals are normally distributed, indicating that the normality assumption of the regression model has been satisfied.

Multicollinearity Test

The multicollinearity test is conducted to detect the presence of a high linear relationship among the independent variables in the regression model. A well-specified model should be free from multicollinearity, as it can disrupt the stability of the estimated regression coefficients. One common method to detect multicollinearity is by using the Variance Inflation Factor (VIF), where a model is considered free from multicollinearity if the VIF values are ≤ 10 (Wooldridge, 2022).

Table 3. Multicollinearity Test Results

Sample: 2014Q1 2024Q4
Included observations: 41

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.61E+13	306.0523	NA
X1	5.69E+10	11.42202	2.068837
X2	277497.9	650.0600	3.597733
X3	9.66E+10	35.15190	2.132848
X4	0.000402	326.7141	4.153488

Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 3, all independent variables have VIF values below 10, namely: inflation at 2.068837, exchange rate at 3.597733, interest rate at 2.132848, and Gross Domestic Product (GDP) at 4.153488. Therefore, it can be concluded that there is no multicollinearity among the independent variables in the regression model, indicating that the model is suitable for use in the subsequent analysis stage.

Heteroskedasticity Test

The heteroskedasticity test is used to detect whether there are differences in the variance of residuals across observations in a linear regression model. A well-specified model should have constant residual variance (homoskedasticity), as unequal variance (heteroskedasticity) can lead to inefficient estimation results. A commonly used method is the Breusch-Pagan-Godfrey test, where the model is considered free from heteroskedasticity if the probability value of ObsR-squared* is greater than the significance level of 0.05 (Wooldridge, 2022).

Table 4. Heteroskedasticity Test Results

Heteroskedasticity Test: White
Null hypothesis: Homoskedasticity

F-statistic	2.016853	Prob. F(14,26)	0.0591
Obs*R-squared	21.34514	Prob. Chi-Square(14)	0.0931
Scaled explained SS	5.748441	Prob. Chi-Square(14)	0.9724

Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 4, the probability value of ObsR-squared* is 0.0931, which is greater than the significance level of 0.05. Therefore, it can be concluded that the regression model does not exhibit signs of heteroskedasticity, indicating that the homoskedasticity assumption is satisfied and the model is suitable for subsequent regression analysis.

Autocorrelation Test

The autocorrelation test is used to identify the presence of a relationship among residuals in a linear regression model, particularly between residuals in the current period and those in the previous period. A well-specified regression model should be free from autocorrelation, as the presence of correlation among residuals can lead to inefficient estimates and biased parameter values. Decision-making in the autocorrelation test is based on the Durbin-Watson (D-W) statistic as follows (Savitri et al., 2021) :

1. If D-W < -2, positive autocorrelation is present.
2. If D-W lies between -2 and +2, no autocorrelation exists.
3. If D-W > +2, negative autocorrelation is present.

Table 5. Autocorrelation Test Results

R-squared	0.353068	Mean dependent var	2231569.
Adjusted R-squared	0.281187	S.D. dependent var	2204898.
S.E. of regression	1869375.	Akaike info criterion	31.83396
Sum squared resid	1.26E+14	Schwarz criterion	32.04293
Log likelihood	-647.5961	Hannan-Quinn criter.	31.91005
F-statistic	4.911814	Durbin-Watson stat	0.572883
Prob(F-statistic)	0.002898		

Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 5, the Durbin-Watson value is 0.572883, which lies between -2 and +2 (-2 < 0.572883 < +2). Therefore, it can be concluded that the regression model does not exhibit autocorrelation and passes the autocorrelation test. According to the applied decision rule, this result indicates that the regression

model does not exhibit strong evidence of autocorrelation among the residuals. Nevertheless, the relatively low Durbin–Watson value suggests that some degree of residual dependence may still be present, which is common in quarterly macroeconomic time-series data. Despite this condition, the regression model remains acceptable for explanatory and inferential purposes, as the main objective of this study is to analyze the relationship between macroeconomic variables and Mudharabah deposits rather than to perform short-term forecasting. Therefore, the regression results can be interpreted cautiously, and the model is considered adequate for further hypothesis testing and discussion.

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to examine the effect of inflation (X_1), exchange rate (X_2), interest rate (X_3), and Gross Domestic Product (X_4) on Mudharabah deposits (Y) at Bank Muamalat. This method is applied to assess both the direction and magnitude of the influence of each macroeconomic variable on Mudharabah deposits within a single econometric model. The regression estimation was performed using EViews 12 software, which is commonly employed for time-series econometric analysis (Wooldridge, 2022).

Table 6. Results of Multiple Linear Regression Analysis

Sample (adjusted): 2014Q1 2024Q1
Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5157742.	5107429.	1.009851	0.3193
X1	530638.8	238484.4	2.225047	0.0324
X2	-1200.440	526.7807	-2.278823	0.0287
X3	235016.8	310876.2	0.755982	0.4546
X4	4.104071	2.004670	2.047255	0.0480

R-squared	0.353068	Mean dependent var	2231569.
Adjusted R-squared	0.281187	S.D. dependent var	2204898.
S.E. of regression	1869375.	Akaike info criterion	31.83396
Sum squared resid	1.26E+14	Schwarz criterion	32.04293
Log likelihood	-647.5961	Hannan-Quinn criter.	31.91005
F-statistic	4.911814	Durbin-Watson stat	0.572883
Prob(F-statistic)	0.002898		

Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 6, the estimated multiple linear regression equation can be expressed as follows:

$$Y = 5157742 + 530638.8X_1 - 1200.440X_2 + 235016.8X_3 + 4.104071X_4$$

The regression results indicate that inflation (X_1) and Gross Domestic Product (X_4) have a positive and statistically significant effect on Mudharabah deposits, as reflected by their probability values being below the 5 percent significance level. The exchange rate (X_2) shows a negative and significant effect, indicating that exchange rate depreciation tends to reduce Mudharabah deposits at Bank Muamalat. Meanwhile, the interest rate (X_3) has a positive but statistically insignificant effect on Mudharabah deposits.

Overall, these findings suggest that macroeconomic stability and economic growth play an important role in influencing Mudharabah deposit behavior. An increase in inflation within a manageable range and higher economic output tend to encourage deposit growth, while exchange rate volatility may weaken public confidence in Mudharabah-based investment instruments.

F-Test

The simultaneous test (F-test) is used to determine the extent to which all independent variables collectively influence the dependent variable in the regression model. In other words, this test aims to assess the significance of the effect of inflation (X_1), exchange rate (X_2), interest rate (X_3), and Gross Domestic Product (X_4) on Mudharabah deposits (Y) at Bank Muamalat.

According to (Imam Ghozali, 2021), the F-test is conducted to evaluate whether the regression model is appropriate and capable of explaining the relationships among the variables. If the significance probability value is less than $\alpha = 0.05$, it can be concluded that there is a statistically significant simultaneous effect of the independent variables on the dependent variable.

Table 7. F-Test Results

R-squared	0.353068	Mean dependent var	2231569.
Adjusted R-squared	0.281187	S.D. dependent var	2204898.
S.E. of regression	1869375.	Akaike info criterion	31.83396
Sum squared resid	1.26E+14	Schwarz criterion	32.04293
Log likelihood	-647.5961	Hannan-Quinn criter.	31.91005
F-statistic	4.911814	Durbin-Watson stat	0.572883
Prob(F-statistic)	0.002898		

Source: Data processed using EViews 12, 2025.

Based on the data processing results presented in Table 7 F-Test Results (Simultaneous), the probability value (F-statistic) is 0.002898. This value is smaller than the significance level of 0.05 (0.002898 ≤ 0.05), indicating that, simultaneously, inflation (X_1), exchange rate (X_2), interest rate (X_3), and Gross Domestic Product (X_4) have a significant effect on Mudharabah deposits (Y) at Bank Muamalat.

Furthermore, the comparison between the calculated F-value and the F-table value shows that the F-calculated is 4.911814, which is greater than the F-table value of 2.49 (F-calculated > F-table). This reinforces the result that all four independent variables jointly influence Mudharabah deposits.

Therefore, it can be concluded that inflation, exchange rate, interest rate, and Gross Domestic Product simultaneously have a significant effect on Mudharabah deposits at Bank Muamalat. Consequently, the research hypothesis stating that macroeconomic variables jointly influence Mudharabah deposits is accepted.

t-Test

The partial test (t-test) is conducted to determine the effect of each independent variable on the dependent variable individually. This test aims to assess the contribution of each independent variable (inflation, exchange rate, interest rate, and Gross Domestic Product) in explaining the dependent variable (Mudharabah deposits) at Bank Muamalat. According to (Gujarati & Porter, 2022), the t-test is used to evaluate the significance of the partial regression coefficients, with decision-making based on the probability value (p-value). If the p-value < 0.05, the alternative hypothesis (Ha) is accepted, indicating that the independent variable has a significant partial effect on the dependent variable. Conversely, if the p-value > 0.05, Ha is rejected and H_0 is accepted, indicating that the independent variable does not have a significant partial effect on the dependent variable.

Table 8. t-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5157742.	5107429.	1.009851	0.3193
X1	530638.8	238484.4	2.225047	0.0324
X2	-1200.440	526.7807	-2.278823	0.0287
X3	235016.8	310876.2	0.755982	0.4546
X4	4.104071	2.004670	2.047255	0.0480

Source: Data processed using EViews 12, 2025.

Based on the data processing results presented in Table 8 – t-Test Results (Partial Effects), the inflation variable (X_1) has a t-statistic value of 2.225047 with a significance probability of 0.0324 < 0.05, and the calculated t-value is greater than the t-table value (2.225047 > 1.68957). This indicates that inflation has a significant effect on Mudharabah deposits at Bank Muamalat.

The exchange rate variable (X_2) has a t-statistic of 2.278823 with a significance probability of 0.0287 < 0.05, and the t-calculated is greater than the t-table value (2.278823 > 1.68957), indicating that the exchange rate also has a significant effect on Mudharabah deposits.

In contrast, the interest rate variable (X_3) shows a t-statistic of 0.755982 with a significance probability of 0.4546 > 0.05, and the t-calculated is smaller than the t-table value (0.755982 < 1.69092), suggesting that the interest rate does not have a significant effect on Mudharabah deposits.

Meanwhile, the Gross Domestic Product variable (X_4) has a t-statistic of 2.047255 with a significance probability of 0.0480 < 0.05, and the t-calculated is greater than the t-table value (2.047255 > 1.69092), indicating that GDP has a significant effect on Mudharabah deposits.

Overall, the partial test results indicate that inflation, exchange rate, and GDP significantly influence Mudharabah deposits, while the interest rate does not have a significant effect. This finding aligns with the studies of (Imam Ghozali, 2021; Jonathan Sarwono, 2023) which emphasize that macroeconomic factors such as inflation and GDP are more dominant in influencing the fund-raising levels of Islamic banks compared to conventional interest rates.

Coefficient of Determination (R^2)

The coefficient of determination (R-square) test is used to measure the extent to which the independent variables explain the variation in the dependent variable in the regression model. The R-square value ranges from 0 to 1, where a value closer to 1 indicates that the independent variables are increasingly able to explain the variation in the dependent variable. According to (Imam Ghozali, 2021), the Adjusted R-square is used as a more accurate measure than the pure R-square, as it accounts for the number of independent variables included in the model. A low Adjusted R-square value indicates that the model's ability to explain the dependent variable is relatively limited. Therefore, this study emphasizes the use of Adjusted R-square to provide a more

realistic evaluation of the explanatory power of the regression model, particularly in studies that involve multiple independent variables and time-series data.

Table 9. Coefficient of Determination (R^2) Test Results

R-squared	0.353068	Mean dependent var	2231569.
Adjusted R-squared	0.281187	S.D. dependent var	2204898.
S.E. of regression	1869375.	Akaike info criterion	31.83396
Sum squared resid	1.26E+14	Schwarz criterion	32.04293
Log likelihood	-647.5961	Hannan-Quinn criter.	31.91005
F-statistic	4.911814	Durbin-Watson stat	0.572883
Prob(F-statistic)	0.002898		

Source: Data processed using EViews 12, 2025.

Based on the results presented in Table 9 Coefficient of Determination (R^2) Test Results, the Adjusted R-Square value is 0.281187. This indicates that the independent variables (inflation, exchange rate, interest rate, and Gross Domestic Product) simultaneously explain 28.11% of the variation in the dependent variable (Mudharabah deposits). The remaining 71.89% is influenced by factors outside the variables included in this model. This finding suggests that macroeconomic variables contribute meaningfully to explaining changes in Mudharabah deposits, although their explanatory power remains moderate.

These results suggest that, although the regression model meets the classical assumptions, there are still other external factors that may affect the movement of Mudharabah deposits, such as public trust in Islamic banks, profit-sharing rates, and national monetary policies (Gujarati & Porter, 2022; Sugiyono, 2022). In addition, internal bank-specific factors and behavioral considerations, which are not captured by macroeconomic indicators alone, may play a crucial role in shaping customer preferences toward Mudharabah deposit products. Therefore, the relatively low Adjusted R-square value does not weaken the model, but rather indicates opportunities for future research to incorporate institutional and behavioral variables or to employ mixed-method approaches in order to obtain a more comprehensive understanding of Mudharabah deposit behavior.

The Effect of Inflation on *Mudharabah* Deposits

The results of this study indicate that inflation has a positive effect on Mudharabah deposits in Islamic banks. When inflation rises, depositors tend to adjust their saving decisions based on expected higher returns, which can pose challenges for banks in maintaining liquidity and product attractiveness. This analysis aims to

understand the extent to which inflation influences the saving behavior of Muslim communities and to determine mitigation strategies that Islamic banks can implement in response to inflationary pressures(A'yun, 2024; Ascarya, 2022).

Based on the multiple linear regression test, a 1% increase in inflation potentially raises Mudharabah deposits by 530,638.8 units. The t-statistic of 2.225 with a p-value of 0.0324 (<0.05) confirms that inflation has a significant effect on Mudharabah deposits. This reinforces the conclusion that depositors are sensitive to changes in the real value of money, as inflation affects their preferences regarding profit-sharing ratios and investment decisions(Kumalasari et al., 2022; Rafika, 2023)

These findings are consistent with the study by(Farooq & Zaheer, 2020), which shows that inflation significantly affects the performance of Islamic banks in Pakistan. Additionally, (Ati et al., 2020) emphasizes that customer perceptions of bank reputation and service quality mediate their response to macroeconomic conditions, including inflation. Research from (Savon & Yousfi, 2023) also highlights the importance of coordination between monetary policy and Islamic banking strategies in maintaining customer trust amid inflationary pressures. These references strengthen the empirical and theoretical grounding of the analysis.

From a theoretical perspective, inflation can be explained by the real money value theory (Gujarati & Porter, 2022), where rising prices reduce the value of savings and diminish the incentive to save. In Islamic economics, maintaining the stability of the real value of money is a principle of justice and fairness in muamalah. If inflation is uncontrolled, the profit-sharing received by depositors does not reflect the actual economic value, potentially causing inequity in the profit-sharing system. Islamic banks need to implement Shariah-compliant hedging instruments and communication strategies to maintain the stability of deposit values (Ascarya, 2022; Ati et al., 2020; Ismail, 2023).

The Financial Services Authority (OJK, 2024) stresses integrated inflation control strategies through fiscal and monetary policies. Islamic banks can strengthen communication by clearly explaining profit-sharing mechanisms and the potential real value of deposits, reducing depositor vulnerability to inflation fluctuations. In line with this, research by (Mollah & Zaman, 2023) published in the International Journal of Islamic and Middle Eastern Finance and Management highlights that robust corporate governance and managerial efficiency significantly enhance Islamic banks' resilience to macroeconomic volatility and inflationary pressures.

In summary, inflation exerts a significant influence on Mudharabah deposits in Islamic banks. Ensuring macroeconomic stability and implementing effective bank risk management strategies are essential to maintaining depositor confidence. This analysis also provides a foundation for examining other variables, such as exchange rate fluctuations and conventional interest rates, which further influence customer saving behavior in Islamic banks.

The Effect of Exchange Rate on Mudharabah Deposits

The results of this study indicate that the exchange rate has a negative effect on Mudharabah deposits in Islamic banks. An increase in the Rupiah exchange rate against foreign currencies tends to reduce the funds placed in Mudharabah deposits, as currency fluctuations influence domestic prices, consumer purchasing power, and banks' fund allocation strategies. Understanding the influence of the exchange rate is crucial for Islamic banks to design deposit products that remain attractive to customers amid currency volatility (Kumalasari et al., 2022; Rafika, 2023).

Based on the multiple linear regression test, the coefficient of the exchange rate variable (X_2) is -1,200.44, indicating that each 1 Rupiah increase in the exchange rate causes a decrease in Mudharabah deposits by 1,200.44 units. The t-statistic with a significance probability of 0.0287 (<0.05) confirms that the exchange rate exerts a statistically significant effect on Mudharabah deposits. This shows that depositors respond to currency fluctuations by adjusting their fund placements, as exchange rate changes affect expected returns and investment risks on Mudharabah products (A'yun, 2024; Kumalasari et al., 2022).

These findings are consistent with the study by (Handayani & Riduwan, 2020), which states that the exchange rate significantly affects Mudharabah deposits. Additionally, (Ati et al., 2020) emphasizes the importance of bank reputation and service quality in mitigating the impact of exchange rate fluctuations on depositors' saving decisions. Research from (Hijriah et al., 2023) also highlights that sound bank governance can help minimize exchange rate risks and maintain the stability of customer fund placements. Together, these studies support the empirical evidence of the negative influence of currency volatility on Mudharabah deposits.

From a theoretical perspective, the effect of the exchange rate on Mudharabah deposits can be explained by the law of supply and demand. A rising exchange rate increases domestic prices relative to foreign currency, reducing domestic demand and

production, and prompting excess funds to be reallocated, including placements in Mudharabah deposits. In the Islamic economic perspective, investment value stability is essential to ensure justice and equity in profit-sharing between banks and depositors (Ascarya, 2022; Ismail, 2023).

From a practical perspective, Islamic banks need to implement hedging strategies and effective communication to maintain depositor confidence in the investment value of Mudharabah deposits. Regulatory authorities, including the Financial Services Authority (Otoritas Jasa Keuangan, 2024) and (Bank Indonesia, 2024) recommend exchange rate risk management as part of prudent financial practices. Banks can utilize multi-currency products or adjust profit-sharing ratios to remain competitive. These findings underscore that exchange rate stability is a critical factor in depositors' saving decisions and the liquidity sustainability of Islamic banks (Alfian, 2022; Ati et al., 2020).

In summary, the exchange rate exerts a significant negative effect on Mudharabah deposits. Islamic banks must strengthen governance and exchange rate risk mitigation strategies to maintain the attractiveness of deposit products. This analysis sets the stage for examining the next variable, the interest rate (or BI rate), which also influences deposit placement decisions in Mudharabah deposits.

The Effect of Interest Rate on Mudharabah Deposits

Based on the results of multiple linear regression, the interest rate variable (X_3) shows a negative effect on Mudharabah deposits. The regression coefficient of 235,016.8 indicates that a 1% increase in the interest rate would theoretically increase Mudharabah deposits by 235,016.8 units; however, the significance probability of 0.4546 (>0.05) demonstrates that this effect is not statistically significant. This finding aligns with previous studies (Ati et al., 2020; Handayani & Riduwan, 2020).

The t-test results further confirm that the interest rate does not significantly influence Mudharabah deposits, so H_{03} is accepted and H_{a3} is rejected. This suggests that changes in the conventional interest rate do not directly impact the amount of funds placed in Mudharabah deposit products. Depositors' behavior in fund placement is influenced more by risk preferences, expected returns, and alternative investment options, such as conventional deposits (Ascarya, 2022; Ati et al., 2020; Ismail, 2023).

These findings are consistent with (Fuadatis Sholikha, 2018), who found that interest rates do not significantly affect depositors' decisions in choosing Mudharabah

deposits. Additionally, (Ati et al., 2020; Handayani & Riduwan, 2020) stated that although interest rates theoretically affect profit-sharing margins, their impact on depositors' saving preferences in Islamic banks is not significant. Other studies, including (Ati et al., 2020) and (Alfian, 2022), emphasize that bank reputation and service quality are more dominant factors in depositors' decisions than interest rates.

From a theoretical perspective, Islamic banking principles differ from conventional banks as they do not use interest rates as the main instrument. Mudharabah deposits operate on profit-sharing ratios agreed upon between the bank and depositors, meaning that changes in conventional interest rates do not directly affect depositor returns. Nevertheless, interest rates remain an important indicator of the macroeconomic environment monitored by both banks and customers (Ascarya, 2022; Ati et al., 2020; Ismail, 2023).

From a practical perspective, Islamic banks should consider conventional interest rates as a reference in designing profit-sharing ratios and investment strategies. However, depositors are advised to evaluate expected returns comprehensively, as fund placement decisions in Mudharabah deposits are influenced more by bank reputation, service quality, and investment security than by market interest rates (Ati et al., 2020; Kumalasari et al., 2022).

Overall, the interest rate variable does not have a significant effect on Mudharabah deposits. This highlights the importance of non-financial factors, such as reputation, service quality, and competitive profit-sharing, in attracting and retaining depositors. These results suggest that strategic planning for Islamic banks should focus on enhancing service quality, maintaining trust, and offering attractive profit-sharing ratios to grow customer funds.

The Effect of Gross Domestic Product (GDP) on Mudharabah Deposits

Based on the results of multiple linear regression, the variable Gross Domestic Product (GDP) (X_4) has a positive effect on Mudharabah deposits. The regression coefficient of 4.104071 indicates that a 1 billion rupiah increase in GDP is associated with an increase in Mudharabah deposits by 4.104071 units; the t-test shows a significance probability of 0.0480 (<0.05), confirming that GDP significantly influences Mudharabah deposits. Therefore, H_{a4} is accepted and H_{04} is rejected(A'yun, 2024; Kumalasari et al., 2022).

An increase in GDP reflects higher income and consumption among individuals and companies. This condition increases the volume of public investment, including Mudharabah deposits in Islamic banking. When GDP and public consumption rise, people have more funds to allocate to investments or Islamic savings. Consequently, higher economic growth enhances the capacity of Islamic banks to mobilize funds through Mudharabah deposit products (Kumalasari et al., 2022).

These findings are consistent with the research of (Kumalasari et al., 2022), which shows that GDP significantly affects Mudharabah deposits in Islamic commercial banks in Indonesia. Moreover, (A'yun, 2024) found a positive relationship between economic growth indicated by macroeconomic indices including GDP and fund mobilization in Islamic deposits, which supports the results of this study.

From a theoretical perspective, this relationship aligns with macroeconomic and Islamic banking theory, which explains that rising GDP increases household income and liquidity in the economy. Higher liquidity enhances the capacity of individuals and companies to place funds in Shariah-compliant financial instruments, including Mudharabah deposits. In the context of Islamic banking, increased public funds enable banks to expand profit-sharing products, thereby promoting efficient fund allocation and supporting economic growth (Ascarya, 2022; Ismail, 2023).

From a practical perspective, Islamic banks need to monitor GDP growth and consumption patterns to design optimal fund mobilization strategies, especially through Mudharabah deposits. These observations reinforce the literature that macroeconomic indicators such as GDP play a critical role in the success of Shariah-compliant financial products and in maintaining banking sector stability (Alfian, 2022; Ati et al., 2020).

Overall, this study confirms that GDP has a positive effect on Mudharabah deposits, highlighting the strong linkage between economic growth and the ability of Islamic banks to mobilize funds. This finding provides opportunities for banks to adjust fund mobilization strategies according to national economic conditions and serves as a foundation for further research on other macroeconomic factors influencing Shariah-compliant banking products (A'yun, 2024; Kumalasari et al., 2022).

The Effect of Inflation, Exchange Rate, Interest Rate, and Gross Domestic Product on Mudharabah Deposits at Bank Muamalat

Based on the results of the simultaneous test (F-test), it can be concluded that the variables of inflation, exchange rate, interest rate, and Gross Domestic Product

(GDP) collectively have a significant effect on Mudharabah deposits at Bank Muamalat. The calculated F-value of 4.911814 with a significance probability of 0.002898 (<0.05) confirms that, simultaneously, these four macroeconomic variables significantly influence Mudharabah deposits. The coefficient of determination (R^2) of 28.11% indicates that 28.11% of the variations in Mudharabah deposits can be explained by changes in inflation, exchange rate, interest rate, and GDP, while the remaining 71.89% is affected by other external factors not included in the model (A'yun, 2024; Kumalasari et al., 2022).

This analysis demonstrates that although each variable has its own individual effect, the combined influence of these macroeconomic variables is substantial in shaping depositor behavior in Mudharabah products. The findings highlight the necessity for Islamic banks to implement an integrated risk management framework and to develop responsive communication and product strategies that are adaptive to prevailing macroeconomic conditions (Ati et al., 2020; Ismail, 2023).

CONCLUSION

Based on the results of this study, it can be concluded that macroeconomic variables, namely inflation, exchange rate, conventional interest rate, and Gross Domestic Product (GDP), have an influence on the amount of Mudharabah deposits at Bank Muamalat Indonesia during the period 2014–2024. Inflation and exchange rate fluctuations negatively affect customers' decisions to place funds, whereas GDP growth positively impacts deposit accumulation. Meanwhile, conventional interest rates do not show a statistically significant effect on Mudharabah deposits, highlighting that depositor behavior in Islamic banks is influenced more by risk perceptions, expected returns, and alternative investment options.

The findings indicate that fund accumulation behavior in Islamic banks is not solely determined by macroeconomic variables, but is also strongly shaped by public trust in the stability of the Islamic financial system and the bank's adherence to Shariah principles. These results provide important implications for bank management and regulators to strengthen deposit mobilization strategies, ensure consistency in monetary policy, and enhance the competitiveness of the Islamic banking industry through transparency, innovative Shariah-compliant products, and operational efficiency.

This study has certain limitations as it relies solely on secondary data from Bank Muamalat Indonesia as a single research object. Therefore, the generalizability of the

findings to the broader Islamic banking sector in Indonesia is limited. Future research is recommended to expand the scope to include multiple Islamic banks, incorporate additional macroeconomic and financial variables such as consumer confidence indices or fiscal policy, and employ panel data approaches to produce more robust and comprehensive results.

By gaining a better understanding of the relationship between macroeconomic variables and Mudharabah deposit accumulation, Islamic banks are expected to enhance the effectiveness of fund management strategies, strengthen financial resilience, and foster greater public trust in the Shariah-compliant banking system in Indonesia.

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