

The Effect of FDR, OER And ROA on The Performance of Islamic Banks Listed on The Indonesia Stock Exchange 2014-2024

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ABSTRACT

Background. The Islamic banking industry in Indonesia has undergone significant structural transformation, particularly following the merger forming Bank Syariah Indonesia in 2021. Post-merger, BSI's profitability from 2022 to 2024 was driven by operational cost efficiency and growth in productive financing, with the FDR and OER (BOPO) ratios contributing to its profitability during that period..

Purpose. The purpose of this study is to analyze the influence of FDR, OER, and ROA on the performance of Islamic banks listed on the Indonesia Stock Exchange (IDX) for the 2014–2024 period.

Method. This quantitative research method employs a multiple linear regression approach. Secondary data from the banks' annual financial reports were selected using a purposive sampling technique, resulting in 34 observations and a sample consisting of four banks listed on the Indonesia Stock Exchange. The multiple linear regression analysis was conducted using SPSS Statistics 27 software.

Results. The partial results of the study indicate that the FDR and OER variables have no significant effect on Bank Performance, the ROA variable has a positive and significant effect on Bank Performance. Simultaneously, the three independent variables have a significant effect on Bank Performance, with an F test significance value of 0.000 (<0.05). The Adjusted R Square (R^2) value of 0.814 indicates that 81.4% of the variation in Bank Performance changes can be explained by the FDR, OER, and ROA variables, while the remaining 18.6% is explained by other factors outside the research model

Conclusion. First, the FDR variable has no significant effect on financial performance. Second, the OER variable also has no significant effect on financial performance. Third, the ROA variable has a positive effect on financial performance. Fourth, simultaneously, FDR, OER, and ROA significantly influence financial performance, so the regression model used is considered adequate to explain the relationship between these variables.

KEYWORDS

Islamic Bank Financial Performance, ROA, FDR, OER

INTRODUCTION

Financial performance in the Islamic sector has unique characteristics that distinguish it from conventional financial systems. The Islamic financial system implements principles such as prohibiting interest, uncertainty, and speculation, and employs a profit-sharing system in various transactions

This ensures that Islamic financial performance is not solely based on profits, but also reflects adherence to Islamic principles, the value of fairness, and business sustainability in accordance with Islamic objectives (Nasfi et al., 2019). The Islamic financial sector in Indonesia has grown rapidly in recent years, supported by growing public awareness of the Islamic financial system and government support through regulatory issues. This is evident in the growing number of Islamic financial institutions, such as Islamic banks, Islamic insurance, and Islamic capital markets (Nasfi et



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al., 2025). Islamic banks face a major challenge in maintaining a balance between business growth and sustainable financial capacity. Fierce competition in the financial services industry, both from other Islamic banks and conventional banks, is pushing companies to be more efficient in managing their resources (Lesmana & Budianto, 2024). When measuring performance, three main indicators are often used: the Financing to Deposit Ratio (FDR), which indicates a bank's ability to disburse financing compared to customer funds. Furthermore, there's the Operational Efficiency Ratio (OER), which measures operational efficiency by comparing operating costs to operating income. Finally, there's Return on Assets (ROA), which shows how effectively a bank uses its assets to generate profits. These three indicators are crucial in determining a bank's success in achieving strong financial performance (Tho'in, 2022).

An empirical phenomenon in the Islamic banking industry is that, following the BSI merger (2021), BSI's profitability from 2022 to 2024 was driven by operational cost efficiency and growth in productive financing; the FDR and BOPO ratios were found to contribute to BSI's profitability during that period. This is noteworthy because BSI dominates the total assets of the national Islamic banking sector, so its performance reflects the industry's overall trends (Sholekah et al., 2025). Anomalies in the FDR: several recent studies (2021–2024) have actually found that the FDR has a positive but insignificant effect on ROA at BSI, and other studies on Islamic banks covering different time periods have found that the FDR has no significant effect on ROA, with a probability value above 0.05. Yet theoretically, a higher FDR should increase revenue from fund disbursement—this inconsistency is an intriguing gap phenomenon worth examining (Maisaroh & Nawangsari, 2026). Conversely, another study found that FDR and BOPO had a significant impact on ROA at Islamic commercial banks during the 2020–2023 period, contradicting the findings in point 2 above—indicating inconsistent results across studies, depending on the sample and time period (Regina, 2024) The trend at Bank Muamalat: ROA rose from 0.02 to 0.09 in 2022, then fell back to 0.02 in 2023, while the FDR ratio actually increased from 2021 to 2023, rising from 38.33% to 40.63% — these opposing fluctuations raise questions about the consistency of the FDR's impact on profitability at non-BSI Islamic banks (Hafiz et al., 2025).

The FDR is also an important reference in assessing the financial health of Islamic financial companies. In the context of Islamic finance, the FDR shows how much funds collected from customers through Islamic savings and deposit products can be redistributed in the form of financing in accordance with Islamic principles. Managing the FDR in Islamic finance is more complex than in the conventional financial system, because companies must ensure that all financing issued complies with Islamic rules and carries manageable risks. The Operational Efficiency Ratio (OER) is equally important in measuring the performance of Islamic banks, with sacrifices made both in the use of productive assets, how much can generate operational income, or in other words, how efficiently management manages its assets. The FDR and OER ratios will reflect the totality of the Bank's activities in the ROA Ratio, how much the bank can generate profit before tax with its assets (Damayanti & Lestari, 2023).

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in other words, how efficiently management manages its assets. The FDR and OER ratios will reflect the totality of the Bank's activities in the ROA Ratio, how much the bank can generate profit before tax with its assets (Ningsih, 2024).

Banks with good financial performance will be listed on the Indonesia Stock Exchange. In other words, if a company is listed on the Indonesia Stock Exchange, it can be said to have good financial performance. The number of Islamic banks in Indonesia until the end of 2024 is 14 Islamic commercial banks and 173 Islamic People's Economic Banks (BPRS). However, only Islamic commercial banks, in accordance with the provisions of the Financial Services Authority (OJK), can be listed on the Indonesia Stock Exchange. However, only five Islamic commercial banks are listed on the Indonesia Stock Exchange. However, between 2014 and 2024, the performance of Islamic banks listed on the Indonesia Stock Exchange will certainly experience changes in accordance with developments in the economic conditions of a country or the global economy. This is where professional bank management is required to maintain its financial performance (Alhammedi et al., 2022).

This study tries to identify the influence of FDR, OER and ROA management in Islamic banks which is more complex because it must adjust to sharia contracts (murabahah, mudharabah, musyarakah) which have different levels of risk which impact the financial performance of Islamic banks, where the FDR, OER and ROA ratios are indicators that play a role in determining the financial performance of Islamic banks, so the purpose of this study is to test and analyze the influence of FDR, OER and ROA on the financial performance of Islamic banks listed on the Indonesia Stock Exchange for the period 2014 to 2024, whether there is an influence of FDR on the financial performance of Islamic banking companies on the Indonesia Stock Exchange, whether there is an influence of OER on the financial performance of Islamic banking companies on the Indonesia Stock Exchange, and whether there is an influence of ROA on the financial performance of Islamic banking companies on the Indonesia Stock Exchange and whether FDR, OER and ROA together affect the performance of Islamic banks on the Indonesia Stock Exchange.

Financial performance measurement in publicly listed companies requires an indicator that not only reflects internal operational efficiency but also captures the value delivered to shareholders as the primary stakeholders. In this context, Return on Equity (ROE) measures how much profit is generated from every unit of shareholder equity invested, and demonstrates management's ability to generate profit from equity investment — a figure that helps determine whether a company deserves further investment. This makes ROE particularly appropriate as a proxy for financial performance in studies involving companies listed on a stock exchange, where the primary concern of market participants is the return on their invested capital (Virgana et al., 2019).

To understand why ROE is chosen over ROA as the dependent variable in this study, it is essential to distinguish the analytical perspective each ratio represents. ROA serves as a measure of top-level management performance in converting assets into corporate profit, while ROE is a key indicator for shareholders that reflects management's ability to generate profit from equity investment. Since this study positions ROA as an independent variable (X3) that captures asset efficiency — one of the factors that drives financial performance — placing ROA simultaneously as the dependent variable would create conceptual overlap and potential multicollinearity in the regression model. ROE, by contrast, captures a distinct and complementary dimension: the return delivered to shareholders, which is the ultimate measure of performance for a listed company (Murtiningsih & Tohirin, 2023).

The relevance of ROE as a performance proxy becomes even more apparent when viewed through the lens of capital market dynamics. In the banking sector, high values of ROA and ROE

signal strong financial health that attracts investors in the stock market, and optimizing ROE not only enhances competitiveness but also supports the long-term sustainability of banking business. For Islamic banks listed on the Indonesia Stock Exchange (IDX), the ability to consistently deliver high ROE is therefore not merely an internal financial target, but a market signal that influences investor confidence and the institution's competitive positioning in the capital market (Anisa Ayuni et al., 2026)

This view is further reinforced by Signaling Theory, which provides a theoretical bridge between a bank's internal financial performance and its external perception by market participants. According to Signaling Theory, the issuance of equity is a positive signal because it increases investor confidence in the company's business operations. By extension, a high and improving ROE signals to investors that management is effectively deploying shareholder capital to generate profits — a signal that is particularly critical for Islamic banks listed on the IDX, where transparency and accountability to shareholders are paramount (Sholekah et al., 2025)

Finally, the use of ROE as a dependent variable in Islamic banking research is supported by established empirical precedent in the international literature. Studies on Islamic banks in Asian countries have consistently used ROE as the primary measure of Islamic bank performance, particularly in the context of companies listed on stock exchanges. This confirms that ROE is not only theoretically justified but also empirically accepted as the most appropriate proxy for financial performance when the research object consists of publicly listed Islamic banking institutions, as is the case in this study of Islamic banks listed on the Indonesia Stock Exchange for the period 2014–2024 (Maharani & Trishananto, 2025)

Financing to Deposit Ratio (FDR): Another influential factor is the financing deposit ratio (FDR), which measures a company's liquidity level through the proportion of financing to third-party funds. An FDR that is too high indicates a high dependence on borrowed funds, which can increase liquidity risk and negatively impact financial performance. Conversely, an FDR that is too low indicates a lack of fund disbursement, which can reduce potential earnings. Therefore, optimal FDR management is key to maintaining a company's financial performance (Wahyudi & Pohan, 2024). According to Wahyudi & Pohan (2024), the calculation is calculated from Total Financing divided by Total Deposit, with the formula;

$$\text{FDR} = \frac{\text{Total Financing}}{\text{Total Third Party Funds Financing}} \times 100\% = \dots\%$$

OEP (Operational Efficiency Ratio) or BOPO is the ratio of Operating Costs to Operating Income. The ratio of Operating Costs to Operating Income measures a company's ability to utilize its resources to optimally generate output or revenue. In the context of banking or the financial sector, operational efficiency is often measured by the OEP (Operational Efficiency Ratio) or BOPO (Operational Costs to Operating Income) (Yamin, 2022). The BOPO formula, as Yamin (2022), is as follows:

$$\text{OER} = \frac{\text{Operating costs}}{\text{Operating Income}} \times 100\% = \dots\%$$

The lower the BOPO value, the more efficient a company's operations are, as the costs incurred to generate revenue are relatively low. Operational efficiency demonstrates management's ability to control operating costs relative to revenue generated. This level of efficiency significantly impacts profitability and long-term financial performance.

Return on Assets (ROA) is a financial ratio used to measure a company's ability to generate net income from its total assets. ROA indicates how efficiently management utilizes all assets to generate profits. The higher the ROA, the better the company's financial performance (Puspitasari et al., 2021), The higher the ROA value, the better the company's financial performance. ROA is calculated by dividing profit before tax by total assets (Puspitasari et al., 2021), using the formula ;

$$\text{ROA} = \frac{\text{Profit Before Tax}}{\text{Average Total Assets}} \times 100\% = \dots\%$$

Financial performance reflects the level of achievement of results from a company's operational activities over a specific period. One commonly used indicator to project financial performance is Return on Equity (ROE). ROE measures a company's ability to generate net income available to shareholders based on its equity. A higher ROE indicates a more efficient company in managing shareholder capital to generate profits (Nasfi et al., 2019). ROE is calculated from Net Profit divided by Total Equity (Ichsani & Suhardi, 2015), with the formula;

$$\text{ROE} = \frac{\text{Net Profit After Tax}}{\text{Total Capital}} \times 100\% = \dots\%$$

The financial performance of Islamic banks is reflected in net profit after tax with the sacrifice of how much invested capital (ROE), of course influenced by the bank's ability to distribute financing or credit (FDR) and how efficiently the bank makes sacrifices to generate profits (OER) and how effectively the bank uses its assets in a certain period (ROA).

Hypothesis

Research hypothesis based on the introduction and theory above, the hypothesis in this research is as follows;

H₀: The Financing to Deposit Ratio (FDR) does not have a positive effect on the financial performance of Islamic banks.

H₁: The Financing to Deposit Ratio (FDR) has a positive effect on the financial performance of Islamic banks.

Operating Costs to Operating Income is a measure of a company's ability to utilize its resources to optimally generate output or revenue. In the context of banking or the financial sector, operational efficiency is often measured by the OEP (Operational Efficiency Ratio) or BOPO (Operational Costs to Operating Income) ratio (Yamin, 2022), with the following hypothesis:

H₀: OER does not have a negative effect on the financial performance of Islamic banks.

H₁: OER has a negative effect on the financial performance of Islamic banks.

Return on Assets (ROA) is a financial ratio used to measure a company's ability to generate net income from its total assets. ROA indicates how efficiently management utilizes all assets to generate profits. The higher the ROA, the better the company's financial performance. ROA is calculated by dividing net income by total assets (Puspitasari et al., 2021), with the following hypothesis:

H₀: ROA has no positive effect on the financial performance of Islamic banks

H₁: ROA has a positive effect on the financial performance of Islamic banks

Financial performance reflects the level of achievement of results from a company's operational activities within a specific period. In addition to the Return on Equity (ROE), Return on Equity (OER), and Return on Assets (ROA), banks commonly use Return on Equity (ROA) to project financial performance. However, this study limited the use of FDR, OER, and ROA indicators to assess the financial performance of Islamic banks. ROE measures a company's ability

to generate net income available to shareholders based on its equity. A higher ROE indicates a more efficient company in managing the capital invested by shareholders to generate profits. ROE is calculated by dividing net income by total equity (Nasfi et al., 2019), with the following hypothesis:

H₀: FDR, OER, and ROA do not have a positive effect on the financial performance of Islamic banks.

H₁: FDR, OER, and ROA have a positive effect on the financial performance of Islamic banks.

RESEARCH METHODOLOGY

This research is quantitative with secondary data from the Indonesia Stock Exchange, using Islamic bank financial reports for the period 2014-2024. The population was sampled using a purposive sampling technique of 4 Islamic commercial banks listed on the Indonesia Stock Exchange: Bank Syariah Indonesia, Bank Aladin Syariah, Bank BTPN Syariah, and Bank Panin Dubai Syariah. The data analysis method applied was multiple linear regression using SPSS Statistics 27 software. Multiple linear regression is used to determine the effect of more than one independent variable on a dependent variable. In the context of this research, multiple regression is used to analyze the effect of FDR, OER, and ROA on the Financial Performance of Islamic Banks Listed on the Indonesia Stock Exchange for 2014-2024.

The independent and dependent variables in this study in the banking or financial sector, operational efficiency is often measured by; The Financing to Deposit Ratio (FDR) is the ratio of total credit extended by a bank to total third-party funds (funds originating from the public in the form of savings, checking accounts, and time deposits). The FDR, as variable X₁, reflects the bank's level of liquidity and efficiency in fund utilization. OEP (Operational Efficiency Ratio) or BOPO (Operational Costs to Operating Income), where OEP is Variable X₂. The OPE Ratio measures how efficient the Bank is in using operational costs to generate profits.

Return on Assets (ROA) is a financial ratio used to measure a company's ability to generate net profit from its total assets. ROA, variable X₃, indicates how efficiently management utilizes all assets to generate profits. The higher the ROA, the better the company's financial performance. Financial performance reflects the level of achievement of results from a company's operational activities within a specific period, measured by Return on Equity (ROE). ROE, the dependent variable Y, measures a company's ability to generate net income available to shareholders based on its equity. A higher ROE indicates a more efficient company in managing the capital invested by shareholders to generate profits.

Descriptive Statistical Tests

Used to obtain a general overview of research data, such as minimum, maximum, average (mean), and standard deviation values. Descriptive statistics provide an initial understanding of data distribution.

Classical Assumption Test

The classical assumption test is a key requirement in classical linear regression to ensure that the estimation results are BLUE (Best Linear Unbiased Estimator). This test is performed before multiple linear regression analysis to ensure that the data meets the classical assumptions, namely:

1. Normality Test, the purpose of which is to test whether the residual data distribution in a regression model is normally distributed. Data normality is required for statistical tests such as the t-test and F-test to be valid. The test uses the Kolmogorov-Smirnov and Normal P-P Plot graphs. Criteria: a significance value > 0.05 indicates that the residual data is normally

distributed. "A normal distribution is required for statistical hypothesis testing to be valid and produce accurate parameter estimates" (Ghozali, 2018).

2. Multicollinearity Test, the aim is to avoid a high correlation between independent variables, by looking at the Variance Inflation Factor (VIF) value. A VIF <10 indicates no multicollinearity (Ghozali, 2018). Multicollinearity indicates a high correlation between independent variables. This condition can cause the estimation results to become unstable. The test uses Tolerance and Variance Inflation Factor (VIF). With Tolerance Criteria >0.1 and VIF <10 indicates no multicollinearity. High multicollinearity will cause the standard error of the regression coefficient to be large so that it is not statistically significant.
3. Heteroscedasticity Test, to see whether the variance of the residuals is constant or not, can be tested using the Glejser test or a scatterplot graph. Heteroscedasticity occurs when the residual variance is not constant. In classical regression, it is required that the error variance must be homogeneous (homoscedastic). The test uses a scatterplot. With the criteria: If the significance value is > 0.05, there is no heteroscedasticity. "Heteroscedasticity can cause the regression coefficient to be inefficient and the statistical test to be invalid" (Ghozali, 2018).
4. Autocorrelation Test: To determine whether there is a correlation between residuals, the Durbin-Watson Test is used. Autocorrelation is a condition in which the residuals of one observation correlate with the residuals of another. This generally occurs in time series data, but it also needs to be anticipated in panel data. The test uses the Durbin-Watson (DW) Test. Criteria: A DW value close to 2 indicates the absence of autocorrelation. "Autocorrelation causes variable estimation to be biased and inefficient."

Multiple Linear Regression Analysis

The multiple linear regression model used in this study is SPSS 27 software and is generally written as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where:

Y: Financial Performance

α : Constant

$\beta_1, \beta_2, \beta_3$: Regression coefficient

X_1 : Financing to Deposit Ratio (FDR)

X_2 : Operational Efficiency Ratio (OEP)/BOPO

X_3 : Return on Aset (ROA)

ϵ : Error term

Partial Significance Test (t-Test), to test the partial influence of each independent variable on the dependent variable. If the significance value is <0.05, then the variable has a significant influence..

Simultaneous Significance Test (F Test), to test whether all independent variables simultaneously influence the dependent variable.

The coefficient of determination (R^2) indicates how much of the variation in the dependent variable can be explained by the independent variables in the model. A high R^2 value indicates a good model in explaining the phenomenon. The coefficient of determination is used to determine how much of the variation in the dependent variable can be explained by the independent variables. An R^2 value close to 1 indicates a high predictive ability of the model. "The higher the R^2 value, the better the model is at explaining the variability of the dependent variable" (Ghozali, 2018)

RESULT AND DISCUSSION

Descriptive statistics provide an overview of research data, including minimum, maximum, and average (mean) values, as well as the number of observations (N). The variables analyzed in this study are: FDR (X_1), OER (X_2), ROA (X_3), dan ROE (Y).

Table 1. Descriptive Statistics

Descriptive Statistics							
	N	Range	Min	Max	Sum	Mean	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
LN_ROE Y	35	8,03	-9,21	-1,18	-115,26	-3,2930	0,31850
LN_ROA X_3	35	6,52	-8,52	-2,00	-165,68	-4,7338	0,37466
LN_OEP X_2	43	6,94	-6,65	0,30	-11,07	-0,2573	0,15877
LN_FDR X_1	44	1,27	-0,58	0,69	-1,30	-0,0295	0,05349
Valid N	34						

Source: processed data (2025)

Based on the results of the descriptive analysis, it is known that the data used has a different number of observations (N) for each variable, with the number of valid data as many as 34. First, the LN_FDR X_1 (log Financing to Deposit Ratio) variable consists of 44 data, with a minimum value of -0.58 and a maximum of 0.69, resulting in a range of 1.27. The total value is -1.30 with an average of -0.0295 and a standard error of 0.05349, which indicates that the company's operational efficiency value is relatively stable and close to zero. Second, the variable LN_OER X_2 (log Operational Efficiency Ratio or Operating Costs to Operating Income) has 43 data points with a range of 6.94. The minimum value is -6.65 and the maximum is 0.30. The total number of data points is -11.07, with a mean of -0.2573 and a standard error of 0.15877. Although the mean is negative, this value is relatively close to zero compared to the other variables. Third, the variable LN_ROA X_3 (log Return on Assets) also has 35 data points with a range of 6.52, a minimum value of -8.52 and a maximum value of -2.00. The total number is -165.68, with a mean of -4.7338 and a standard error of 0.37466. This also indicates that the return on assets is generally negative. Fourth, the LN_ROE Y (log Return on Equity) variable has 35 data points with a minimum value of -9.21 and a maximum of -1.18, resulting in a range of 8.03. The total value of all data is -115.26, with an average value (mean) of -3.2930 and a standard error of 0.31850. A negative average value indicates that equity performance tends to be generally negative.

Statistical Test Results

Classical assumption test to ensure that the model used meets the BLUE (Best Linear Unbiased Estimator) requirements.

1. Classical Assumption Test

a). Normality Test

A normality test is used to determine whether research data is normally distributed. Data normality is a prerequisite for using classical linear regression analysis.

Table 2. Results of Normality Test after using Winsorizing and LN One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Predicted Value
N		35
Normal Parameters ^{a,b}	Mean	-3,3106503
	Std. Deviation	1,70473334
Most Extreme Differences	Absolute	0,150
	Positive	0,109

	Negative	-0,150	
Test Statistic		0,150	
Asymp. Sig. (2-tailed) ^c		0,046	
Monte Carlo Sig. (2-tailed) ^d	Sig.	0,052	
	99% Confidence Interval	Lower Bound	0,046
		Upper Bound	0,058
Source: processed data (2025)			

In the initial stage, the results of the normality test indicated that the research variables were not normally distributed. This was evident from the Kolmogorov-Smirnov test significance value, which was below the 0.05 level. This condition indicated the presence of extreme data (outliers) and asymmetric data distribution. To address this, two corrective steps were taken: winsorizing and natural logarithmic (ln) transformation. Winsorizing is used to reduce the influence of extreme data by limiting observation values to certain percentiles, thus stabilizing the data distribution. After winsorizing, the data distribution showed improvement, with the significance value of the normality test increasing. Next, a natural logarithmic (ln) transformation was performed on variables that were still not normal after winsorizing.

The results of the normality test after the natural logarithm (ln) transformation on variables that were still not normal after winsorizing. Showed a significant increase. The significance value of the Kolmogorov-Smirnov test from the Monte Carlo exact test was greater than 0.05, which means the data was normally distributed. Thus, the research data after winsorizing and ln transformation met the normality assumption and was suitable for further regression analysis. Monte Carlo was used as a technique to strengthen the normality test, especially with the exact test on the Kolmogorov-Smirnov (K-S) test. That when the sample size is small, the results of the normality test can be invalid due to distribution limitations. Therefore, the "Monte Carlo exact test" is a solution to produce a more accurate significance value. If the probability of significance of the K-S test results is greater than the significance limit (e.g. > 0.05), then it is concluded that the residual data is normally distributed Ghazali (2018).

b). Multicollinearity Test

A multicollinearity test was conducted to determine whether there is a strong relationship between the independent variables in the regression model. Multicollinearity can cause difficulties in interpreting the influence of each independent variable on the dependent variable due to the high correlation between variables. The test was conducted by looking at the Tolerance and Variance Inflation Factor (VIF) values. The criteria used were if the Tolerance value is greater than 0.10 and the VIF value is less than 10, then it can be concluded that there is no multicollinearity. Based on the results of data processing, all independent variables in this study showed a Tolerance value > 0.10 and $VIF < 10$. Thus, it can be concluded that the regression model is free from multicollinearity problems and is suitable for use in further analysis.

Table 3. Coefficients^a

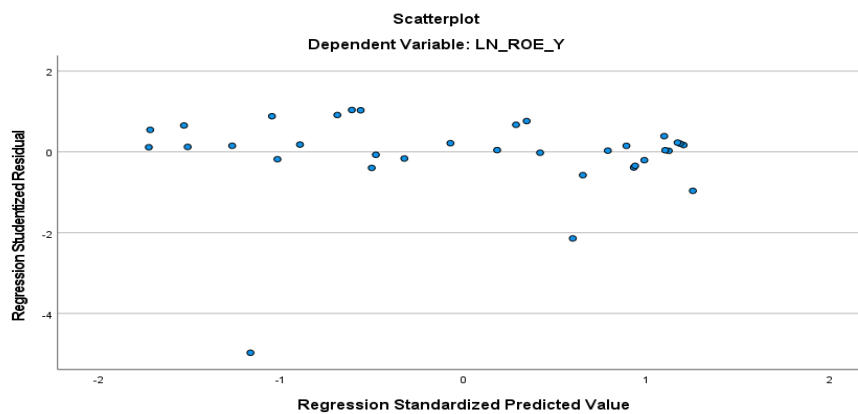
Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LN_FDR_X ₁	0,211	4,739
	LN_OER_X ₂	0,737	1,356
	LN_ROA_X ₃	0,226	4,415
Source: processed data (2025)			

Based on the multicollinearity test results table, the LN_FDR_X₁ variable has a tolerance value of 0.211 and a VIF of 4.739; the LN_OER_X₂ variable has a tolerance value of 0.737 and a VIF of 1.356; while the LN_ROA_X₃ variable has a tolerance value of 0.226 and a VIF of 4.415. All independent variables show a tolerance value > 0.10 and a VIF < 10. Thus, it can be concluded that the regression model in this study does not experience symptoms of multicollinearity, so it can be continued to the next stage of analysis.

c). Heteroscedasticity Test

The heteroscedasticity test aims to determine whether the residual variances between observations are unequal in the regression model. If the residual variances are unequal, heteroscedasticity occurs, which can compromise the validity of the regression results. This test is performed using the point distribution pattern on a scatterplot. If the points on the scatterplot are randomly distributed without a specific pattern, heteroscedasticity is not present. Based on the analysis, the points on the scatterplot appear to be randomly distributed. This indicates that no heteroscedasticity is found in the research regression model, thus the model can be said to meet the assumption of homoscedasticity.

Figure 1. Scatterplot



d). Autocorrelation Test

The autocorrelation test is used to determine whether there is a correlation between the residuals in the current period and the residuals in the previous period. Autocorrelation can cause problems in regression, especially if the data used is a time series. Autocorrelation testing is performed using the Durbin-Watson (DW) Test. The test criterion is that if the DW value is close to 2, it can be concluded that there is no autocorrelation. Based on the test results, the DW value obtained is between the upper limit (du) and (4-du), so it can be concluded that the regression model in this study is free from autocorrelation. Thus, the model used meets the classical assumptions and can be used for further hypothesis testing.

Table 4. Model Summary^b

Model Summary ^b				
Model	Change Statistics			
	df1	df2	Sig. F Change	Durbin-Watson
1	3	30	0,000	1,849

Source: processed data (2025)

Based on the test results, the Durbin-Watson value was 1.849 with the number of independent variables (k) of 3 and the number of observations (n) of 34. Based on the Durbin-Watson table at a significance level of 5%, the dL value was 1.2707 and dU was 1.6519. The decision-making criteria are if the DW value is between dU and (4 - dU), then it can be concluded

that there is no autocorrelation in the regression model. Because the DW value (1.849) is in the dU range $(1.65) < 1.849 < (4 - dU) (2.35)$, it can be concluded that the regression model in this study is free from autocorrelation. Thus, the regression model used meets the classical assumptions and is suitable for use in further hypothesis testing.

2. Hypothesis Testing

The discussion in this study aims to interpret the results of statistical tests that have been conducted, including partial significance tests (t-test), simultaneous tests (F-test), and coefficient of determination (R^2). The results of the partial test (t-test) show that each independent variable has a different influence on the dependent variable. The variable (FDR_X1) does not have a significant influence on financial performance (LN_ROE_Y). The financing variable for third-party funds (OER_X2) is also insignificant, indicating that optimal distribution of financing funds can increase the rate of return on equity. Meanwhile, the asset profitability variable (ROA_X3) shows an influence that is in line with profitability theory, where the greater the profit generated from assets, the greater the return on equity obtained by the company.

a). Simultaneous Test (F Test)

The simultaneous test or F-test is used to determine whether the independent variables used in the regression model simultaneously have a significant effect on the dependent variable. The decision-making criterion is that if the significance value (Sig.) is less than 0.05, it can be concluded that all independent variables simultaneously influence the dependent variable.

Table 5. ANOVA^a

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96,439	3	32,146	49,024	0,000 ^b
	Residual	19,672	30	0,656		
	Total	116,111	33			
a. Dependent Variable: LN_ROE_Y Source: processed data (2025)						

Based on the analysis results in the ANOVA table, the calculated F value was 49.024 with a significance level of 0.000. This significance value is much smaller than 0.05, so it can be concluded that the independent variables consisting of LN_FDR_X₁, LN_OER_X₂, and LN_ROA_X₃ simultaneously have a significant effect on the dependent variable, namely LN_ROE_Y. These results indicate that the regression model used in the study is fit to explain the relationship between the independent variables and the dependent variable. In other words, operational efficiency, financing of third-party funds, and asset profitability together are able to explain variations in the company's financial performance projected with ROE.

b). Partial Significance Test (t-Test)

The partial test (t-test) is used to determine the effect of each independent variable on the dependent variable individually. The test criterion is if the significance value (Sig.) < 0.05, then the independent variable has a significant effect on the dependent variable.

Table.6 Coefficients^a

Coefficients ^a						
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,643	0,894		0,719	0,478

	LN_FDR_X ₁	0,599	1,642	,060	0,365	0,718
	LN_OER_X ₂	0,058	0,143	,035	0,405	0,689
	LN_ROA_X ₃	0,808	0,133	,959	6,076	0,000

Source: processed data (2025)

Based on the regression results table, the LN_FDR_X₁ variable has a regression coefficient of 0.599 with a significance level of 0.718 (>0.05). This indicates that the Financing to Deposit Ratio (FDR) variable does not significantly influence financial performance projected with ROE. Furthermore, the LN_OER_X₂ variable has a regression coefficient of 0.058 with a significance level of 0.689 (>0.05). These results indicate that financing from third-party funds (FDR) also does not significantly influence ROE. Meanwhile, the LN_ROA_X₃ variable has a regression coefficient of 0.808 with a significance level of 0.000 (<0.05). This indicates that asset profitability (ROA) has a positive and significant effect on financial performance (ROE). In other words, the higher a company's ability to generate profits from its assets, the greater its return on equity (ROE). Partially, the results of this study indicate that of the three independent variables used, only ROA has a significant influence on ROE. This confirms the important role of asset profitability in determining the financial performance of Islamic finance companies in Indonesia.

c). Coefficient of Determination (R²)

The coefficient of determination (R²) is used to determine how much the independent variable is able to explain the variation in the dependent variable.

Table 7. Model Summary^b

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	0,911 ^a	0,831	0,814	0,80977	0,831	49,024

Source: processed data (2025)

Based on the regression test results, an R value of 0.911 was obtained, indicating a very strong relationship between the independent variables (LN_FDR_X₁, LN_OER_X₂, LN_ROA_X₃) and the dependent variable (LN_ROE_Y). The R Square value of 0.831 indicates that 83.1% of the variation in changes in financial performance projected with ROE can be explained by the variables of operational efficiency, financing of third-party funds, and asset profitability. The Adjusted R Square value of 0.814 strengthens these results by taking into account the number of independent variables in the model. This means that after adjustment, 81.4% of the variation in ROE can still be explained by the three independent variables in the study. Thus, the regression model used can be said to have excellent ability in explaining the relationship between the variables studied. Meanwhile, the remaining 18.6% is influenced by other factors outside this research model, such as macroeconomic factors, regulations, and market conditions.

DISCUSSION

1. The Effect of Financing Deposit Ratio (FDR) on Financial Performance

Based on the analysis results, the Financing Deposit Ratio (FDR) variable has a significance value of 0.599 (> 0.05), which means it does not significantly influence financial performance as proxied by Return on Equity (ROE). This indicates that the level of third-party funds disbursed in the form of financing has not been able to improve the company's financial performance. This condition may be caused by the quality of the disbursed financing being less than optimal, the existence of financing risks, or the rate of return from the financing not being commensurate with the funds raised. Thus, although the FDR reflects the ability of Islamic financial institutions

to disburse funds, in this study, the FDR was not proven to significantly improve financial performance.

2. **The Influence of Operational Efficiency Ratio (OEP)/Operational Expenses to Operating Income (BOPO) on Financial Performance.**

The regression results show that the BOPO variable has a regression coefficient of 0.058 with a significance level of 0.689 (>0.05). This means that operational efficiency, as measured by the BOPO ratio, does not significantly influence financial performance, as proxied by Return on Equity (ROE). These results indicate that the company's operational cost control has not had a direct impact on the return on equity. This may occur because high operational expenses can still be offset by other income or profits earned by the company, so the effect of BOPO on financial performance is not significant. In other words, operational efficiency has not yet fully become a primary factor determining the financial performance of companies in the Islamic finance sector.

3. **The Influence of Return on Assets (ROA) on Financial Performance.**

Return on Assets (ROA) showed different results compared to FDR and OER. The ROA variable has a regression coefficient of 0.808 with a significance value of 0.000 (<0.05), thus having a positive and significant effect on financial performance. This means that the greater the company's ability to manage assets to generate profits, the better the financial performance, as indicated by ROE. This finding confirms that asset profitability is a key factor in determining a company's financial success. Therefore, companies in the Islamic financial sector need to focus on productive and efficient asset management to increase profitability and provide optimal returns on equity.

4. **The Effect of FDR, OER/BOPO, and ROA on Financial Performance Simultaneously.**

Simultaneously, the FDR, OER, and ROA variables significantly influence financial performance. This indicates that although FDR and OER are partially insignificant, when combined with ROA in a single regression model, all three are able to explain variations in financial performance. In other words, the regression model used is appropriate for describing the relationship between independent variables and financial performance. These results demonstrate that a company's financial performance is not determined by a single factor, but rather the result of the interaction of several aspects, namely operational efficiency, fund disbursement rate, and asset profitability. However, in this study, the ROA variable still plays a dominant role as the most significant factor in influencing ROE.

CONCLUSION

Based on the data analysis and discussion, the following conclusions can be drawn:

First, the FDR variable does not significantly influence financial performance, indicating that operational efficiency does not directly impact financial performance. Second, the OER variable also does not significantly influence financial performance, indicating that the level of fund disbursement has not significantly impacted performance. Third, the ROA variable has a positive effect on financial performance; the higher the ability to generate profits from assets, the better the company's financial performance. Fourth, simultaneously, FDR, OER, and ROA significantly influence financial performance, thus the regression model used is deemed adequate to explain the relationship between these variables.

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