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Determinants of Islamic Business Unit Performance in Indonesia: Evidence from 2022–2024

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Abstract

Introduction: Islamic Business Units (Sharia Business Units/UUS) has a strategic value to enhance the Islamic banking system in Indonesia, but its performance in terms of profitability is still unstable, especially during the post-pandemic time. The sustainability of UUS profitability is also questioned because of operational inefficiencies, increased financing risks, and difficulty in intermediation activities. This problem creates the necessity of the empirical study of the main factors that determine the UUS financial performance within the dynamic economic environment. **Research Methods:** The research method consists of a quantitative research design where the data used are monthlyean values of Sharia Business Units in Indonesia between the period of January 2022 and December 2024. The Yield Proportion, Non-Performing Financing (NPF), Financing to Deposits Ratio (FDR), and Operating Expenses to Operating Income (BOPO) are studied using multiple linear regression to determine their relationship with Return on Assets (ROA). The validity and reliability of the regression model is carried out by classical assumption tests. **Findings:** The empirical evidence shows that all the explanatory variables, including NPF, FDR, BOPO, and Yield Proportion, have negative impacts on ROA that are significant both in part and at the same time, which indicates that the inefficiency, financing risk, and not optimum intermediation undermine UUS profitability. **Conclusion:** The

	paper has concluded that operational efficiency, enhancement of credit risk management and optimization of functions of intermediaries are the main factors needed to increase the profitability of UUS. The findings lead to the Islamic banking literature and offer managerial and policy elucidations on how this is attained through sustainable performance of Sharia Business Units in Indonesia.
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INTRODUCTION

Over the past 19 years, the Islamic banking in Indonesia has experienced tremendous asset, financing, and customer base growth (Nugraha et al., 2022). Despite this progress, Sharia Business Units (UUS), as strategic entities within the national Islamic financial system, continue to face challenges related to operational efficiency and sustainable profitability (Kabiru & Wan Ibrahim, 2020). n comparison with Islamic Commercial Banks (BUS), UUS tend to be institutionally reliant on their traditional parent banks, which impacts managerial discretion, resource allocation performance, and business focus (Djuitaningsih, 2020).

Among the major managerial problems UUS has to cope with is stable financial performance in the face of market uncertainty, financing risk, and pressure of operations efficiency (Edmans et al., 2016). In this regard, common indicators of the intermediation performance, financing risk, and managerial efficiency of the Islamic banking institutions include Yield Proportion, Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), Operating Expenses to Operating Income (BOPO) and Return on Assets (ROA).

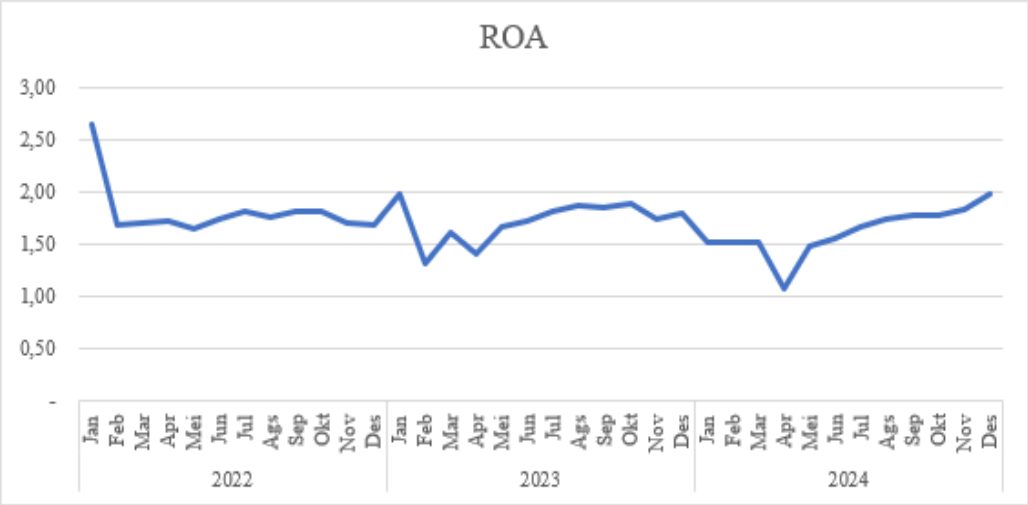

Figure 1. Development of ROA of Sharia Business Units 2022-2024

Source: Worldbank

Figure 1 provides the projections of the ROA of Sharia Business Units in Indonesia in the years 2022-2024. After the post-pandemic adjustment in 2022, the tendency of ROA was

stabilized at the highest point of 2.64 and then decreased to the range of 1.661.81 to the end of the year. The 2023 global inflationary pressures, tightening, and seasonal seasons (Ramadan and Idul Fitri) sharply affected ROA before returning to the 2nd half of the year to record 1.89 percent in October. Although ROA dropped to 1.07 percent in April, in 2024, there was a slow recovery up to 1.97 percent in December. This trend indicates the active adaptation of UUS profitability in the environment of uncertainty in the economy, efficiency improvement activities, and digitalization of the Islamic banking industry.

Different past empirical studies have reported the significance of financing risk, intermediation, and operational efficiency in the establishment of Islamic bank performance. Within the framework of financing risk, there are conflicting empirical results available on the correlation between Non-Performing Financing (NPF) and profitability in various researches. In Indonesia, some researchers report a positive link between NPF and Return on Assets (ROA), which indicates the possibility of an increase in risk-taking and the increase in returns (Chabachib et al., 2019; Roswinna et al., 2023). On the other hand, other researchers conclude that increased NPF has a negative implication on profitability and growth, which is plagued by poor credit risk management and hiked provisioning expenses (Setyawati, 2016; Widarjono, 2018). These conflicting results suggest that the effects of NPF on profitability might differ in accordance with bank-specific features and the operation conditions.

Equally, there is also no conclusive evidence at the empirical level of Financing to Deposit Ratio (FDR) and profitability. Whereas the study indicates that an increased FDR lowers ROA as a result of liquidity pressure and misaligned fund allocation (Roswinna et al., 2023), in other cases, it is positively correlated, which implies that it is an effective intermediation strategy and efficient funds allocation (Chabachib et al., 2019). Such a variation would mean that the impact of intermediation on the performance of banks could be mediated by the operational efficiency and the market conditions. Conversely, the Operating Expenses to Operating Income (BOPO) ratio clearly proves that increasing operational costs in comparison to income lead to decreased profitability and proves that the focus on efficiency is the key aspect of enhancing the performance of the Islamic banking (Erina & Damayanti, 2019).

The theoretical basis of the relationships of these variables is on a number of established frameworks in financial economics and Islamic banking. The Financial Intermediation Theory focuses on the functioning of banks acting as intermediaries that allow organizing funds between the units of the surplus and the deficit where the effectiveness of the intermediation process is seen in such indicators as FDR and Yield Proportion (Lewis, 2014; Maamor & Abdullah, 2015; Muda et al., 2013, 2020; Suzuki & Miah, 2018). The Operational Efficiency Theory goes on to designate that effective management efficiency and cost management, which is typically quantified by BOPO, are highly significant factors of bank profitability (Faraj, 2021; Gharaibeh et al., 2023; Msomi & Olarewaju, 2022; Shorikov et al., 2018). Moreover, a risk-profitability theory implies that a higher risk of financing financing indicated by higher NPF results in lower profitability because of limited earnings and increased requirements to provide risk cover (Do et al., 2020; Shalini et al., 2025).

Return on Assets (ROA) is a broad measure of the performance of banks because it assesses the efficiency with which the bank uses its assets to generate profits in managing the financing risk, intermediation level, and operational expenses (Ercegovac et al., 2020; Karamoy & Tulung, 2020; Rinkevičiūtė & Martinkutė-Kaulienė, 2014; Spaseska et al., 2025). Increased ROA correlates with increased market performance and financial health (Abidin et al., 2017; Zikri et al., 2023). However, a majority of the current research is aggregate in nature that is, combining various forms of Islamic banks and is based on annual or quarterly data, thereby restricting its effectiveness in identifying short-term effects and the institutional peculiarities of Sharia Business Units (UUS).

RESEARCH METHOD

Research Type and Approach

This paper will use the quantitative associative research design, in order to test the correlation between 2 or more independent variables to a single dependent variable. The associative strategy is suitable in determining and quantifying the direction and strengths of the relationships between financial performance indicators in Islamic banking. The empirical test involves a multiple linear regression that makes use of Ordinary Least Squares (OLS) methodology in estimating the effect of Yield Proportion, Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), and Operating Expenses to Operating Income (BOPO) on profitability simultaneously.

Population and Sampling

The sample population of this study is all the Sharia Business Units (Unit Usaha Syariah/UUS) in Indonesia. Since the UUS are minimal, and full financial information is available, the research uses a census sampling method, according to which all UUS having full and consistent information will be used in the investigation. The empirical data set will include 36 monthly observations which will be included in the post-pandemic data between January 2022 and December 2024, so the study will be able to observe short-term dynamics and changes in UUS performance.

Data Collection

The research is based on secondary information found in the publicly available and authoritative sources only. Sharia business units monthly financial statistics were obtained with reference to the official publications of Financial Services Authority (Otoritas Jasa Keuangan -OJK) and especially Sharia Banking Statistics (Statistik Perbankan Syariah/SPS) and with the references to publicly disclosed Sharia business units financial reports. These are the most common sources employed to conduct empirical research on Indonesian Islamic banking and guarantee reliability and consistency of data.

Measurements of Variables

Measures of the variables to be used in this study are as follows:

- Return on Assets (ROA) is a dependent variable that is employed to analyze the profitability of a bank and is a ratio of the net income to the total assets of the bank and indicates the efficiency of the assets in generating profits.
- Non-Performing Financing (NPF) is the financing risk which is measured as a ratio of non-performing financing to total financing.
- Financing to Deposit Ratio (FDR) indicates performance in intermediation and it is computed as the ratio of the total financing to the funds of third parties.
- Operation expense ratio to operation revenues, BOPO is an indicator of the efficiency of the operations.
- Yield Proportion Yield proportion denotes the rate of financing yield and reflects the amount of yield produced as a result of productive financing.

All measurements are based on definitions and standards that are usually used in the Islamic banking literature as well as official OJK reporting guidelines.

Data Analysis Model and Justification

The data analysis was conducted using EViews version 12. The following multiple linear regression model was estimated:

$$ROA_t = \beta_0 + \beta_1 YIELD_t + \beta_2 NPF_t + \beta_3 FDR_t + \beta_4 BOPO_t + \varepsilon_t \quad (1)$$

Description:

ROA_t : Return on Assets at month t

β_0 : Constant

$\beta_1, \beta_2, \beta_3, \beta_4$: Regression coefficient of each independent variable

ε_t : Error term

where ROA_t denotes Return on Assets in month t, β_0 is the constant term, β_1–β_4 are the regression coefficients, and ε_t is the error term.

The reason behind the use of the OLS regression method is the fact that it is suitable in estimating linear relationships among variables, and it is also widely used in research on banking performance. In a bid to ascertain the validity and reliability of the regression results, classical assumption tests were undertaken such as normality, multicollinearity, heteroscedasticity and autocorrelation tests. T -tests and F -tests were used to assess statistical significance and the goodness of fit of the model was determined by using the coefficient of determination (R 2).

Conceptual Framework

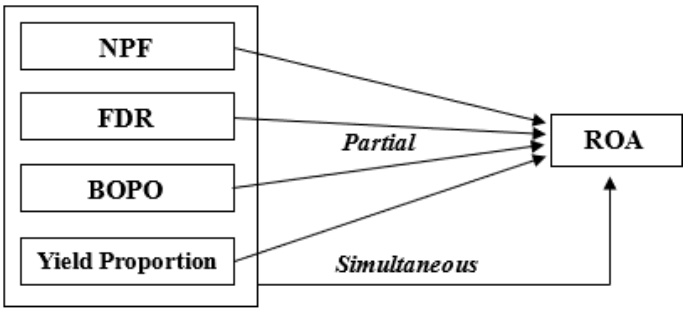

Figure 2. Conceptual Framework

The conceptual framework shows the postulated causal connections among the variables in this research where ROA is the dependent variable, whereas the independent variables are Yield Proportion, NPF, FDR and BOPO. The arrowheads indicate the causal hypotheses of the two explanatory variables on profitability that are tested.

RESULT AND DISCUSSION

1. Statistical Description

During the first step, the descriptive analysis was performed to give general idea about the data peculiarity of each variable. The statistics due to be mentioned are minimum, maximum and mean and standard deviation.

Table 1. Descriptive Statistics of Research Variables

Statistics	ROA	NPF	FDR	BOPO	YIELD_PRO
Mean	1.716396	2.240001	9.716027	79.14300	67.73.950
Median	1.730350	2.188171	9.654857	79.10062	67.73.987
Maximum	2.642346	2.664541	1.035130	86.58.935	70.17.978
Minimum	1.066825	1.933533	8.900190	67.76254	6550487
Std. Dev.	0.240543	0.177626	3.992097	3.109709	1357251
Skewness	0.898938	0.760625	-0.144241	-0.743478	0.103594
Kurtosis	8.499327	2.997841	2.209214	7.134773	2.026.993
Jarque-Bera	5.021243	3.471306	1.062847	28.96108	1.484.505
Probability	0.000000	0.176285	0.587768	0.000001	0.476040
Sum	6.179024	8.064003	3497.770	2849.148	2438.622
Sum Sq. Dev.	2.051388	1.104289	557.7895	338.4601	64.47.460
Observations	36	36	36	36	36

Notes: Eviews 12

The table shows the descriptive statistics of some of the important variables giving a rough outline of how the distribution of data changes. The central tendency can give initial insight with the mean and median values, whereas the closeness of mean (1.716396) and median (1.730350) of the variable ROA signify a somewhat symmetrical distribution, but the means of the rest of variables show values higher than the medians and are therefore skewed in some way. Maximum and minimum values in the ranges indicate the degree of variability in each of the variables, whereby FDR indicates a wide range of 89.00190 to 103.5130.

The standard deviation is the displacement about the mean and in the given case of FDR (3.992097), there is evidence of existence of considerable variability. The skewness and

kurtosis provide an idea about the shape of distribution; since skewness value in the case of ROA is 0.898938, it indicates skewness towards the right and kurtosis value is 8.499327 which means it is leptokurtic or extreme values. This is also justified by Jarque-Bera statistics where the very high value of probability (0.000000) obtained in the case of the ROA causes the null hypothesis of normality to be rejected and after using such normality-based statistical tests as problematic.

Basic summary statistics such as the sum and sum of squared deviations are also provided. Finally, the table shows that there are 36 observations for each variable.

2. Classical Assumption Test

During validation of the regression model, several classical assumption tests were run:

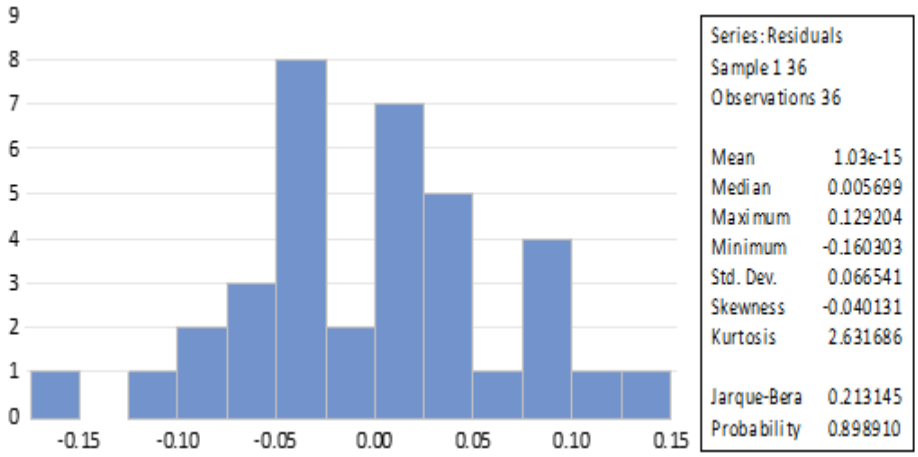

Figure 3. Normality Test Using The Jarque-Bera Test

Source: Eviews 12

Jarque-Bera test gave a probability of 0.213145 and 0.898910 and state an important finding. In a case when p-value is significantly higher than the value of a basic test 0.05 ($p > 0.05$), the null hypothesis remains free of questioning. That is, residuals of this regression are normally distributed in a statistically desirable manner.

Multicollinearity Test: Using the Variance Inflation Factor (VIF) value

Table 2. Multicollinearity Test: Using the Variance Inflation Factor (VIF)

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	186.488	13428.44	N/A
NPF	0.010589	384.96	2.339129
FDR	1.81E-05	1.230.503	2.016326
BOPO	1.79E-05	8.092.883	1.212919
YIELD_PROPORTION	0.000156	5157.697	2.012281

Notes: Eviews 12

With the VIF value, the multicollinearity test results have shown that none of the independent variables in the regression model shows serious multicollinearity. The Centered VIF value for each variable is NPF of 2.339129, FDR of 2.016326, BOPO of 1.212919, and YIELD_PROPORTION of 2.012281. All these values are far much below the standard 5 used in many academic publications setting that tends to determine the existence of a problem of multicollinearity. This implies that there is low correlation among the independent variables,

hence reduced risk to unstable regression coefficient estimates. Meanwhile, the very high VIF value on the constant (C) of 13,428.44 is not a cause for concern, as this value is an uncentered VIF and is not relevant in evaluating multicollinearity between independent variables. Consequently, the lack of multicollinearity in this regression model has very compelling reasons for a fairly sure econometric interpretation of its results.

Heteroscedasticity test: white test

Table 3. Heteroscedasticity Test Results: White Test

Statistic	Value	Probability (p-value)
F-statistic	1.541562	0.1798
Observed * R-squared	18.24596	0.1958
Scaled explained SS	11.03804	0.6830

Notes: Eviews 12

Based on the results of the heteroscedasticity test using the White test method, the F-statistic value is 1.541562 with a probability of 0.1798, and the Obs*R-squared value is 18.24596 with a Chi-Square probability of 0.1958. Both probability values are greater than the general significance level of 0.05, which means we fail to reject the null hypothesis (H_o) stating that there is no heteroscedasticity in the model. In other words, the residuals of the model are homogeneously distributed or constant (homoskedastic). This result is reinforced by the probability value of the Scaled Explained SS of 0.6830, which is also well above the significance threshold. Consequently, we can conclude that the model used does not show heteroscedasticity, so the estimation results can be trusted and fulfill one of the important assumptions in classical regression analysis.

Autocorrelation Test: Serial Correlation LM Test

Table 4. Autocorrelation Test Results: Serial Correlation LM Test

Statistic	Value	Prob. (F) or Prob. (Chi-Square)	p-value
F-statistic	1.841710	Prob. F(7, 24)	0.1251
Obs * R-squared	12.58027	Prob. Chi-Square(7)	0.0830

Notes: Eviews 12

The results of the autocorrelation test which used the Breusch-Godfrey Serial Correlation LM Test method indicate that, the F-statistic value is 1.841710 with a probability of 0.1251, and the Obs*R-squared value is 12.58027 with a Chi-Square probability of 0.0830. Both probability values are above the general significance level of 0.05, which means that the null hypothesis (H_o) cannot be rejected. The null hypothesis in this test states that there is no autocorrelation in the regression model.

Thus, as an academic and researcher who upholds the principle of econometric validity, it is apparent that serial autocorrelation is not present in the regression model. That is, the

residuals of the model do not show a systematic repeating pattern over time, and the classical assumption of linear regression regarding residual independence has been met.

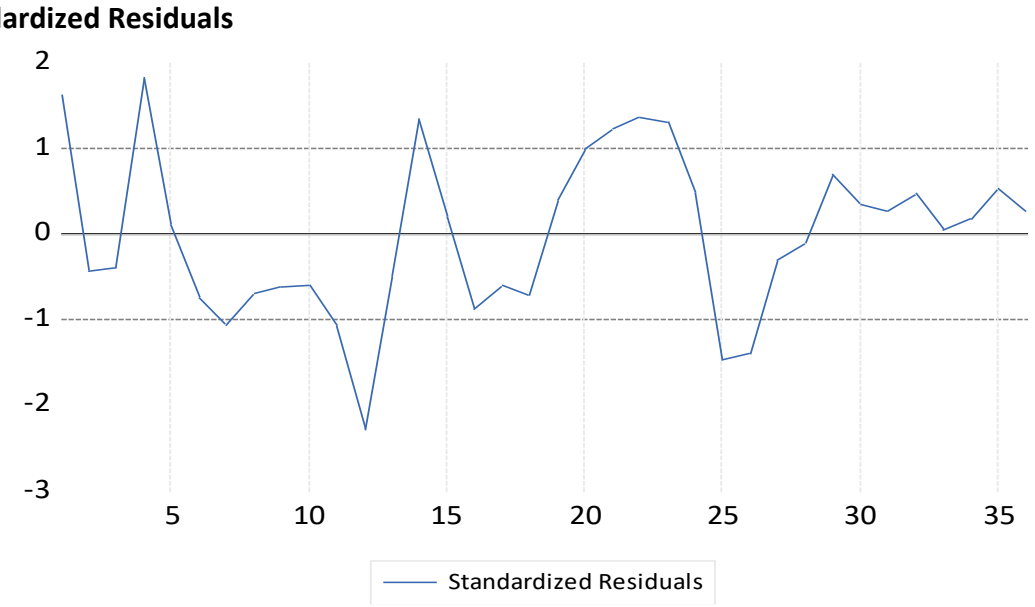

Figure 4. Standardized Residuals
Source: Eviews 12

The graph of standardized residuals indicates that the standardized residuals are normally distributed and reveal no systematic trend as it displays a random spreading around the zero line with most of it falling within the range of +/-2. Thus, all classical assumptions have been met and the regression model is suitable to be used as a basis for further analysis.

Multiple Linear Regression Results

The multiple linear regression model was estimated using the OLS method using EViews. The estimation results are as follows:

Table 5. Multiple Linear Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.43.583	1.365536	9.106921	0.0000
NPF	-0.477088	0.102903	-4.636303	0.0001
FDR	-0.014796	0.004251	-3.480589	0.0015
BOPO	-0.077067	0.004233	-18.20807	0.0000
YIELD_PROPORTION	-0.031206	0.012491	-2.498316	0.0180
R-squared	0.923477	Mean dependent var		1.716396
Adjusted R-squared	0.913603	S.D. dependent var		0.240543

S.E. of regression	0.070704	Akaike info criterion	-2.332395
Sum squared resid	0.154969	Schwarz criterion	-2.112462
Log likelihood	46.98310	Hannan-Quinn criterion	-2.255632
F-statistic	93.52721	Durbin-Watson stat	1.038386
Prob(F-statistic)	0.00000		

Notes: Eviews 12

T Test Analysis

- The NPF variable has a t-statistic value of -4.636303 with a prob. value (significance) of 0.0001 <0.05, it can be concluded that the NPF variable has a significant effect on the ROA variable.
- The FDR variable has a t-statistic value of -0.014796 with a prob. (significance) value of 0.0015 <0.05, it can be concluded that the NPF variable has a significant effect on the ROA variable.
- The BOPO variable has a t-statistic value of -18.20807 with a prob. (significance) value of 0.0000 <0.05, it can be concluded that the NPF variable has a significant effect on the ROA variable.
- The Yiled Proprtion variable has a t-statistic value of -2.498316 with a prob. (significance) value of 0.0180 <0.05, it can be concluded that the NPF variable has a significant effect on the ROA variable.

F Test Analysis

It is known that the F-Statistic value is 93.52721 with the Prob value, (F-statistic) of 0.000000 < 0.05, so it can be concluded that the NPF, FDR, BOPO, Yiled Proprtion variables have a significant effect simultaneously (simultaneously) on the ROA variable.

Regression Equation Analysis

12.43583 - 0.477088 - 0.014796 - 0.077067 - 0.031206

- The coefficient value obtained is 12.43583, it means that if the independent variable increases by one unit on average. Then the dependent variable will increase by 12.43583.
- The regression coefficient value of the NPF variable is negative - 0.477088, it means that if the NPF variable increases, the ROA variable will decrease by - 0.477088. and vice versa.
- The regression coefficient value of the FDR variable is negative - 0.014796, it means that if the FDR variable increases, the ROA variable will decrease by - 0.014796. and vice versa.
- The regression coefficient value of the BOPO variable is negative - 0.077067, it means that if the BOPO variable increases, the ROA variable will decrease by - 0.077067. and vice versa.
- The regression coefficient value of the Yiled Proprtion variable is negative - 0.031206, it means that if the Yiled Proprtion variable increases, the ROA variable will decrease by - 0.031206. and vice versa.

DISCUSSION

The Effect of Non-Performing Financing (NPF) on ROA

According to the empirical evidence provided, it was found that Non-Performing Financing (NPF) causes a negative impact on Return on Assets (ROA) of Sharia Business Units (UUS) in Indonesia. The implication of this finding is that an increase in financing risk lowers profitability since non-performing financing dilutes income stream and has to give more provisioning to raise net returns, reducing net returns. According to the risk-profitability theory, high credit risk causes asset underutilization as well as profitably damaging banks.

This finding aligns with other past research which note that NPF has negative correlation with ROA in Islamic banking (Affandy & Arinta, 2022; Setyawati, 2016; Widarjono, 2018). It however is contrary to results by (Roswinna et al., 2023) and (Chabachib et al., 2019), who record a positive correlation between NPF and profitability, which implies that the greater the risk-taking, the greater the returns. The split points out the fact that, in the case of UUS, whose business models are based on structural reliance on traditional parent banks, high NPF is more apt to manifest weak risk management than active risk-taking.

The Effect of Operating Expenses to Operating Income (BOPO) on ROA

The findings indicate that BOPO has negative and significant impact on ROA, which means that increase in operational costs comparative with the income also decreases the profitability of UUS. This observation is decisive in operational efficiency theory, which states that good cost management and managerial performance are vital factors of the performance of the bank.

This result is consistent with the previous empirical studies (Erina & Damayanti, 2019; Faraj, 2021; Msomi & Olarewaju, 2022), hat show that ineffective cost structures are major scourge to the profitability of a bank. In the case of UUS, high BOPO ratios could indicate repetitive operational procedures, low economies of scale and reliance on parent bank infrastructure, all of which limit cost efficiency and profitability.

The Effect of Financing to Deposit Ratio (FDR) on ROA

The estimation findings indicate that FDR has a negative implication on ROA indicating that too much financing as compared to deposits can lead to pressure on liquidity and profitability. Financial intermediation theory states that good intermediation must be based on balanced manner on how to distribute funds to productive financing without affecting the stability of liquidity.

The above result is in line with (Roswinna et al., 2023), which holds that excessively aggressive financing may decrease profitability because it raises liquidity risk and inefficiencies. Nevertheless, it is opposite to (Chabachib et al., 2019), who discover that FDR and ROA have a positive correlation, which proves successful intermediation. The adverse impact noted in the present study suggests that in the post-pandemic environment, UUS can experience difficulties with the control of liquidity during the expansion of the financing in economic uncertainty.

The Effect of Yield Proportion on ROA

The findings show that Yield Proportion has a negative relationship with ROA, which implies that an increase in financing yields does not always lead to an increase in profitability. This can happen when higher yields are linked to more risky portfolios of financing and this

increases the number of defaults and the cost of operation. This observation can be interpreted under the intermediation sense whereby optimization of yields without proper risk management destroys the overall performance.

This finding is opposite to the literature that shows a positive impact of financing yield on profitability (Muda et al., 2020), but consistent with the literature that describe the higher returns to be associated with higher risk and inefficiency in the implementation of the Islamic banking practice (Suzuki & Miah, 2018).

On the whole, results indicate that the efficiency of operations, as well as rational management of risks is more important to UUS profitability, compared to aggressive intermediation or expansion of yields. This weakness of UUS in terms of inefficiencies and structural constraints is demonstrated by the negative impact of NPF, BOPO, FDR, and Yield Proportion on ROA, especially in the post-pandemic era.

The findings suggest that the UUS managers need to focus on enhancing the operational effectiveness and risk management capitalization. To enhance profitability, BOPO needs to be reduced under cost rationalization, digitalization, and streamlined operations. Moreover, managers ought to improve the credit screening and monitoring systems to regulate the NPF levels. Instead of ensuring that it only increases volumes of financing or yields, UUS ought to embrace a balanced intermediation approach that prioritizes on quality of assets and sustainable returns. Policy wise, the results indicate that the regulator especially the Financial Services Authority (OJK) needs to offer specific assistance to enhance the structural efficiency of UUS.

The policies that will promote digital transformation, better governance models, and enable more managerial independence of parent conventional banks can contribute to the increase in UUS performance. Besides, regulation supervision must focus on risk-based supervision so that financing growth does not jeopardize the financial stability.

CONCLUSION

The proposed research aims at examining the factors that affect profitability of Sharia Business Units (UUS) in post-pandemic Indonesia in the year 20222024 on the basis of monthly data and Return on Assets (ROA) as the key performance measure. The empirical findings prove that Non-Performing Financing (NPF), Financing to Deposit Ratio (FDR), Operating Expenses to Operating Income (BOPO), and Yield Proportion have a significant negative influence on ROA, partly and at the same time. Of these variables, BOPO has the strongest negative effect meaning that the inefficiency of operations is a critical factor that limits UUS profitability. These results imply that increased financing risk, ineffective intermediation, increasing operation cost, and inefficient yield management all lead to poor financial performance of UUS.

Regarding managers and policy, the findings suggest that the main strategic focus of UUS management should be on enhancing operational efficiency in the form of cost rationalization of operations, process optimization, and digital transformation. It is also

necessary to enhance credit risk management and decrease the NPF levels to protect profitability and asset quality. Secondly, UUS ought to streamline their intermediation role by sensitively coordinating the growth and yield creation of financing to eliminate the possibility of the exerting too much liquidity-related pressure and exposure to risk. In theory, this research would add to the literature on Islamic banking by strengthening the applicability of the operational efficiency theory and financial intermediation theory in determining the profitability dynamics of UUS particularly when it is investigated based on high-frequency post-pandemic data.

This research has a few limitations, notwithstanding its contribution. The review is based entirely on the financial metrics of numerical data and lacks any qualitative aspects, including good governance, management methods, and extent of digitalization that can also contribute to UUS performance. Additionally, the monthly (data) used may also fail to capture intraperiod changes, although it does capture short-term dynamics. It is thus recommended that future studies incorporate the indicators of governance and digitalization, consider alternative data frequencies e.g. quarterly, daily data and use mixed-method techniques to get a more detailed picture of the determinants of profitability in Islamic banking.

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