

The Effect of Bank-Specific Factors on Return on Assets of Sharia Commercial Banks in Indonesia (2022–2024)

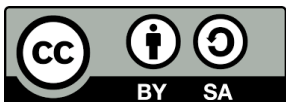
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Article Info	Abstract
<p><i>Keywords:</i></p> <ul style="list-style-type: none">○ Islamicity Performance Index;○ Intellectual Capital;○ Operational Efficiency Ratio;○ Non-Performing Financing;○ Return on Assets	<p>Purpose – This study aims to obtain empirical evidence on the influence of Islamicity Performance Index (proxied by Profit Sharing Ratio), Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing on Return on Assets.</p> <p>Design/methodology/approach – This study uses quantitative research. It utilizes secondary data. The population is 14 Sharia Commercial Banks listed on the Financial Services Authority in Indonesia between 2022 and 2024. The sample is 11 Sharia Commercial Banks listed on the Financial Services Authority in Indonesia between 2022 and 2024. The total number of observations in this study is 33. The analysis technique used to test the hypotheses is multiple regression analysis using Eviews9 software.</p> <p>Findings – The results of this study indicate that the Profit Sharing Ratio variable has a negative and significant effect on Return on Assets. The Intellectual Capital has a negative and insignificant effect on Return on Assets. The Operational Efficiency Ratio has a negative and insignificant effect on Return on Assets. The Non-Performing Financing has a negative and significant effect on Return on Assets.</p> <p>Research limitations/implications – This study was conducted on Sharia Commercial Banks in Indonesia during the period 2022–2024 using secondary data obtained from the banks' annual financial statements. The findings provide practical insights for bank management, regulators, and future researchers regarding the determinants of profitability in Sharia banking. In particular, the significant role of the Profit Sharing Ratio highlights the importance of strengthening profit-sharing-based financing as a reflection of Sharia compliance and productive financing orientation to enhance return on assets. Meanwhile, the significant negative effect of Non-Performing Financing (NPF) underscores the critical need for effective financing risk management and asset quality control to maintain bank profitability.</p> <p>JEL: M41, G21, G32</p>
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INTRODUCTION

Sharia banking in Indonesia has experienced rapid growth in recent years, in line with increasing public awareness of Islamic Sharia-based financial principles. As the country with the largest Muslim population in the world, Indonesia has enormous potential for the development of the Sharia banking industry. Sharia banks not only offer financial products and services to meet the financial needs of the community, but also promote moral values, ethics, and principles of justice in line with Islamic teachings, thus providing an alternative for people who want to avoid usury and transactions that are not in accordance with Sharia principles (Rozin et al., 2025).

The development of Sharia banking is also supported by regulatory policies, particularly Law No. 21 of 2008 on Sharia Banking, which provides a strong legal basis for the growth of this industry. The Financial Services Authority encourages Sharia Business Units (UUS) with certain assets to spin off and form independent Sharia banks. This policy aims to create Sharia banks that are more professional, focused, and capable of increasing competitiveness and accelerating the expansion of the Sharia banking industry in Indonesia (Hasanah et al., 2025).

However, Sharia banking still faces various challenges, particularly competition with conventional banks, which have a larger market share and a more extensive network. This situation requires Sharia banks to continue to improve their marketing strategies, strengthen product innovation, and utilize digital technology to maintain and enhance their competitiveness. Amid these challenges, the financial performance of Sharia banking shows encouraging progress.

Based on Financial Services Authority data, the total assets of the national Sharia banking sector at the end of 2024 reached IDR 980.30 trillion with a year-on-year growth of 9.88%, which is higher than the growth of conventional commercial bank assets, which was only 5.9%. Although conventional banks still have much larger assets in nominal terms, the nearly double growth rate of Sharia banking indicates an acceleration in performance and increased competitiveness in the Sharia banking industry. In addition, profitability performance as measured by Return on Assets also shows that Sharia banking consistently has a higher Return on Assets than conventional banking during the 2022-2024 period, even though both types of banking are experiencing a downward trend in Return on Assets.

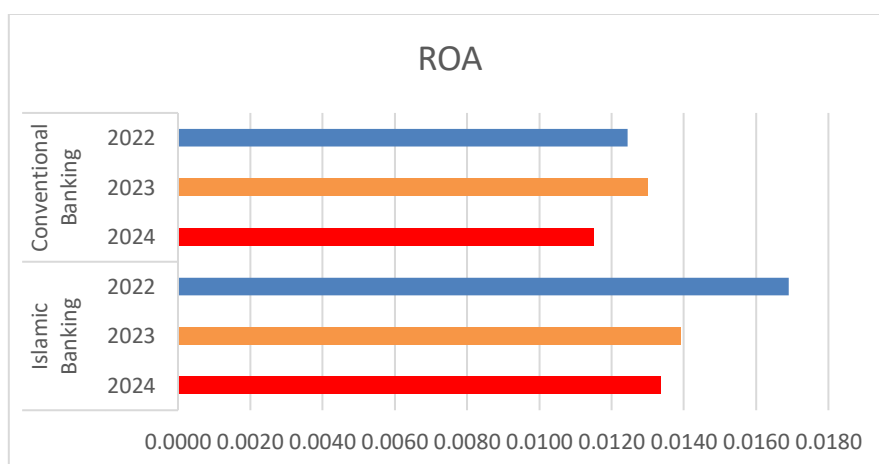


Figure 1. ROA for Conventional Banking and Sharia Banking

The graph above compares the Return on Assets between conventional banking and Sharia banking for the period 2022-2024. In general, it can be seen that both types of banking have experienced a downward trend in Return on Assets over the last three years, but Sharia banking

has consistently had a higher Return on Assets value than conventional banking. This shows that Sharia banking tends to be more efficient in utilizing its assets to generate profits. In 2022, Sharia banking recorded a Return on Assets of around 1.7%, while conventional banking was in the range of 1.2%. Furthermore, in 2023, the Return on Assets of Sharia Banking declined to around 1.4%, and this trend continued until 2024, where Sharia banking still slightly outperformed with a Return on Assets of around 1.35%, while conventional banking fell to 1.15%. This difference illustrates that even though both face the same challenges in maintaining profitability, Sharia banking can maintain relatively more stable financial performance compared to the conventional banking system.

The decline in Return on Assets in both types of banking indicates pressure on the profitability of the banking industry, which may be caused by increased operating costs, a decline in asset quality, a slowdown in financing growth, and unstable macroeconomic conditions. However, Sharia banking has been able to maintain a relatively higher Return on Assets, reflecting the efficiency of asset management and the resilience of the Sharia financial system to economic fluctuations. This advantage is inseparable from the characteristics of Islamic financing, which is based on real assets and a profit-sharing system, encouraging more careful risk management and a focus on the real sector.

Despite these advantages, Sharia banking still faces internal challenges, such as high operational costs, limitations in the development of profit-sharing-based financing, and increasing competition among Sharia banks. Therefore, strategic efforts are needed to improve operational efficiency, expand market share, and strengthen the quality of management and resources.

The selection of Return on Assets as the dependent variable in this study is based on its relevance as a key indicator of Sharia banks' financial performance and the inconsistency of prior empirical findings regarding its determinants. Return on Assets reflects the effectiveness and efficiency of Sharia banks in managing their assets to generate profits, thereby representing overall management performance. Moreover, mixed results in previous studies concerning the effects of the Islamicity Performance Index, proxied by the Profit Sharing Ratio, Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing on Return on Assets, indicate the existence of a research gap. Addressing this gap, the present study investigates the effect of the Islamicity Performance Index (Profit Sharing Ratio), Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing on Return on Assets using recent data from Sharia Commercial Banks in Indonesia during the 2022–2024 period.

This study contributes to the Islamic banking literature by offering updated and comprehensive empirical evidence on the profitability determinants of Sharia banks through the integration of Sharia compliance indicators, efficiency measures, intellectual resources, and financing risk. From a practical perspective, the findings provide valuable insights for Islamic bank management in optimizing profit-sharing-based financing and strengthening non-performing financing control to enhance profitability. Furthermore, the results are expected to support regulators, particularly the Financial Services Authority, in formulating policies to strengthen the resilience and competitiveness of the Sharia banking industry. For investors and academics, this study offers a clearer understanding of profitability drivers in Sharia banks and serves as a reference for investment decisions and future research in Islamic banking.

LITERATUR REVIEW

Sharia Enterprise Theory

Triyuwono in 2000. Sharia Enterprise Theory views organizational accountability as multidimensional, encompassing responsibility not only to shareholders but also to Allah Subhanahu wa Ta'ala, society, and the environment. Within the context of Islamic banking, this theory emphasizes that compliance with sharia principles should be reflected not merely in formal regulations but also in substantive operational performance. In this study, Sharia Enterprise Theory underpins the Islamicity Performance Index, particularly the Profit Sharing Ratio, as an indicator of how far Islamic banks implement justice, transparency, and partnership principles. However, empirical findings in recent studies suggest that compliance with sharia values does not always translate directly into higher short-term profitability, especially when profit-sharing schemes involve higher monitoring costs and greater exposure to information asymmetry.

Resource-Based View Theory

Wernerfelt in 1984. Resource-Based View (RBV) Theory explains that firms gain competitive advantage through the effective utilization of internal resources that are valuable, rare, inimitable, and non-substitutable. Intellectual Capital – comprising human capital, structural capital, and relational capital – represents a strategic intangible asset for Islamic banks. While RBV predicts a positive relationship between intellectual capital and financial performance, industry-specific conditions such as high training costs, technology investment, and regulatory compliance in Islamic banking may delay the realization of financial benefits. Consequently, intellectual capital investments may initially increase operational costs, causing empirical results to diverge from theoretical expectations in the short term.

Growth Theory

Penrose in 1965. Growth Theory emphasizes that firm growth is driven by managerial efficiency in utilizing internal resources. In the banking industry, particularly Islamic banking, growth often involves branch expansion, system development, and service enhancement, which can increase operational costs. The Operational Efficiency Ratio is therefore interpreted not only as a measure of inefficiency but also as an indicator of strategic investment during expansion phases. This perspective helps explain why a higher Operational Efficiency Ratio does not always reduce profitability, as Islamic banks may compensate for increased costs through revenue diversification and long-term growth strategies.

Risk and Return Theory

Markowitz in 1952. Risk and Return Theory posits an inverse relationship between risk and realized returns when risks are not well managed. In Islamic banking, Non-Performing Financing represents financing risk that can disrupt cash flows, increase provisioning expenses, and weaken asset productivity. Unlike conventional banks, Islamic banks face additional constraints in restructuring problematic financing due to sharia compliance, making NPF a more critical determinant of profitability. This industry-specific characteristic strengthens the theoretical expectation of a negative relationship between NPF and Return on Assets.

Signaling Theory

Spence in 1973. Signaling Theory explains how firms communicate their performance to

external stakeholders to reduce information asymmetry. In this study, Return on Assets functions as a key financial signal reflecting management efficiency in utilizing assets. However, in Islamic banking, Return on Assets may not fully capture the broader objectives of sharia compliance, which can lead to discrepancies between performance signals and actual value creation based on Islamic principles.

Hypotheses Development

The Influence of Islamicity Performance Index on Return on Assets

Based on Sharia Enterprise Theory, Islamic banks are expected to enhance profitability by implementing profit-sharing mechanisms that reflect fairness, transparency, and accountability (Triuwono, 2000). A higher Profit Sharing Ratio indicates a stronger orientation toward productive, partnership-based financing aligned with sharia values, which theoretically should increase public trust and improve financial performance. Previous studies by Imsar et al. (2023) and Sari et al. (2025) support this argument by showing a positive effect of Profit Sharing Ratio on Return on Assets. However, industry-specific conditions such as higher monitoring costs, moral hazard, and information asymmetry in profit-sharing contracts may weaken this relationship in practice, particularly in the short term.

H₁: Islamicity Performance Index (Profit Sharing Ratio) has a positive effect on Return on Assets.

Influence Intellectual Capital Against Return on Assets

Based on resource-based view theory suggests that effective management of intellectual capital enhances organizational capability and financial performance (Wernerfelt, 1984). Empirical evidence from Hasibuan & Windari (2024) and Rosiana et al. (2020) indicates a positive relationship between Intellectual Capital and Return on Assets. Nevertheless, in Islamic banking, substantial investments in human resource development, information systems, and governance structures may increase costs before generating measurable financial returns. This industry context explains why empirical findings may diverge from theoretical predictions, particularly over shorter observation periods.

H₂: Intellectual Capital has a positive effect on Return on Assets.

The Impact of Operational Efficiency Ratio on Return on Assets

Growth Theory posits that increased operational activity is part of a firm's expansion process (Penrose, 1965). In Islamic banking, rising operational costs reflected in a higher Operational Efficiency Ratio may signal strategic investment aimed at strengthening long-term competitiveness rather than pure inefficiency. Studies by Sirait et al. (2023) and Situmorang et al. (2024) find a positive effect of Operational Efficiency Ratio on Return on Assets, suggesting that efficiency should be interpreted within the context of growth stages. This perspective helps reconcile empirical findings that do not always align with the conventional assumption that higher Operational Efficiency Ratio necessarily reduces profitability.

H₃: Operational Efficiency Ratio has a positive effect on Return on Assets.

The Effect of Non-Performing Financing on Return on Assets

Based on Risk-Return Theory, higher unmanaged risk leads to lower realized returns (Markowitz, 1952). In Sharia banking, increased Non-Performing Financing reflects financing risk that directly reduces profitability through higher provisioning costs and constrained asset utilization. Given the limited flexibility in restructuring problematic financing under sharia principles, the negative impact of Non-Performing Financing on Return on Assets is expected to be more pronounced. Empirical findings by Ishak & Pakaya (2022) show that Non-Performing Financing has a negative effect on Return on Assets.

H₄: Non-Performing Financing has a negative effect on Return on Assets.

RESEARCH METHOD

Types and Sources of Research Data

The type of data used in this study is secondary data, namely data provided by other parties and does not come from direct sources. The data obtained is in the form of financial statements of Sharia Commercial Banks published by the Financial Services Authority (FSA) for 2022 – 2024. The population of this study includes Sharia Commercial Banks listed in the Financial Services Authority during the observation period, totaling 14 banks. The sampling technique used in this study is purposive sampling, as sample selection was based on specific criteria to ensure data completeness and consistency. From the total population, 11 Sharia Commercial Banks met the sampling criteria and were included in the analysis. This approach ensures that only banks with complete and comparable financial data throughout the observation period are analyzed.

Research Analysis Methods and Hypotheses

This study applies panel data regression analysis to examine the influence of the Islamicity Performance Index (Profit Sharing Ratio), Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing as independent variables on Return on Assets as the dependent variable. Three panel data estimation models are considered: the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine the most appropriate estimation model, model selection tests are conducted, including the Chow test, Hausman test, and Lagrange Multiplier test. Hypothesis testing is performed using the t-test to examine the significance of individual variables, while the coefficient of determination (R^2) is used to assess the explanatory power of the regression model.

Measurement

Islamicity Performance Index (X_1)

Budianto (2025) defined the Islamic Performance Index is a comprehensive measurement framework that evaluates the extent to which a Sharia bank not only formally complies with sharia rules, but also substantively embodies sharia values and objectives (maqasid) in all aspects of its operations, including financial, social, ethical, and governance dimensions. Measurement of Islamicity Performance Index is measured using the formula Imsar et al., (2023)

$$\text{Profit Sharing Ratio} = \frac{\text{Mudharabah} + \text{Musyawarah}}{\text{Total Financing}}$$

Intellectual Capital (X_2)

Mariati et al. (2025) defined the Intellectual Capital is an intangible asset owned by an

organization that provides added value and competitive advantage. This capital includes knowledge, skills, experience, and relationships possessed by individuals and organizations that contribute to the creation of corporate value. Intellectual Capital measurement is measured using the formula Dianty et al. (2024)

There are several stages in measuring intellectual capital, namely:

1. Calculating value added (VA), calculated as the difference between output and input.

$$VA = \text{Out} - \text{In}$$

Information:

Out: output, total sales and other income.

In: input, sales expenses and other costs (excluding employee expenses)

2. Calculating the value added of capital used (VACA)

$$VACA = VA/CE$$

Information:

VA: Value added

CE: Capital employed (available funds, equity, net profit)

3. Calculating the value added of human capital (VAHU)

$$VAHU = VA/HC$$

Information:

VA: Value added

HC: Human capital (employee costs)

4. Calculating the value added of structural capital (STVA)

$$STVA = SC/VA$$

Information:

SC: Structural capital = VA - HC

VA: Value added

5. Calculating the value added of intellectual capital (VAIC)

$$VAIC = VACA + VAHU + STVA$$

Operational Efficiency Ratio (X₃)

Siregar (2025) defined the Operational Efficiency Ratio is a ratio that describes the level of efficiency of banks in carrying out their activities. This ratio shows the level of efficiency in running operations or banks. Measurement of the Operational Efficiency Ratio using the Putri & Lestari formula (2025)

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

Non-Performing Financing (X₄)

Apriana & Mursalin (2020) defined Non-Performing Financing (NPF) as a ratio of problematic financing to the total amount of financing to be disbursed by Sharia banks. In accordance with the criteria set by Bank Indonesia, NPF (Non-Performing Financing) refers to financing that experiences a lack of smoothness or congestion in the financing process. Non-Performing Financing measurement is measured using the formula Latifah & Wirman (2021)

$$NPF = \frac{\text{Non-Performing Financing}}{\text{Total Financing}} \times 100\%$$

Return on Assets (Y)

Zimmerer & Scarborough (2009) defined the Return on Assets is how much profit a

company generates from every dollar of assets it owns. This ratio explains how effectively a company utilizes all of its assets to generate profits. The measurement of Return on Assets was measured using the formula Sari et al. (2025)

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} \times 100\%$$

RESULTS

Table 1. Descriptive Test Results

	IPI	IC	OER	NPF	ROA
Mean	0.5559	2.7668	0.7190	0.0205	0.0147
Median	0.6052	2.7726	0.7232	0.0191	0.0131
Maximum	0.9893	5.4522	0.9853	0.0375	0.0837
Minimum	0.0017	1.1810	0.3880	0.0070	0.0002
Std. Dev.	0.2830	0.9368	0.1446	0.0098	0.0165
Skewness	-0.3713	0.5407	-0.0177	0.1917	2.7993
Kurtosis	2.1889	3.6204	2.7379	1.6160	11.2424
Jarque-Bera	1.6627	2.1372	0.0962	2.8360	136.5128
Probability	0.4355	0.3435	0.9530	0.2422	0.0000
Sum	18.3451	91.3055	23.7258	0.6777	0.4859
Sum Sq. Dev.	2.5636	28.0844	0.6690	0.0031	0.0087
Observations	33	33	33	33	33

Source: Output Eviews9 (2025)

Selection of the Best Panel Data Model

Chow Test

Decision-making criteria and based on the value of F calculated:

- If the probability (Prob) on the cross-section $F < 0.05$ and if F calculates $> F$ table then a better model is Fixed Effect Model (FEM).
- If the probability (Prob) on the Cross Section F is > 0.05 and If F is calculated $< F$ table then a better model is Common Effect (CEM).

Table 2. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	14.974234	(10,18)	0.0000
Cross-section Chi-square	73.657892	10	0.0000

Source: Output Eviews9 (2025)

Based on the results of the Chow Test using Eviews9, it is stated that the probability value of Cross Section F is 0.00 which is less than the significance level value ($\alpha = 0.05$). This means that the best model used is the Fixed Effect Model (FEM). Therefore, a Hausman Test is needed in order to choose the best model between the Fixed Effect Model and the Random Effect Model.

Hausman Test

Decision-making criteria and based on the value of F calculated:

- If the probability on the Cross Section Random > 0.05 , then the better model is the Random

Effect Model (REM).

- If the probability on Cross Section Random < 0.05 , then the better model is the Fixed Effect Model (FEM).

Table 3. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.369769	4	0.0789

Source: Output Eviews9 (2025)

The Hausman test results show a probability value of 0.0789, which is greater than the significance level of 5% ($\alpha = 0.05$). These results indicate that the most appropriate model is the Random Effect Model (REM). Therefore, a Lagrange Multiplier test needs to be conducted to determine the more appropriate model to use between the Common Effect Model and the Random Effect Model.

Lagrange Multiplier Test

Decision-making criteria and based on LM values:

- If the significance on Both < 0.05 and if the value of LM $>$ Chi square then the better model is Random Effect Model (REM).
- If it is significant on Both > 0.05 and if the value of LM $<$ Chi square table then the better model is Common Effect Model (CEM)

Table 4. Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	13.34652 (0.0003)	1.357846 (0.2439)	14.70437 (0.0001)
Honda	3.653289 (0.0001)	-1.165266 --	1.759298 (0.0393)
King-Wu	3.653289 (0.0001)	-1.165266 --	0.427711 (0.3344)
Standardized Honda	4.917201 (0.0000)	-0.937845 --	-0.459950 --
Standardized King-Wu	4.917201 (0.0000)	-0.937845 --	-1.532166 --
Gourieriou, et al.*	--	--	13.34652 (< 0.01)

*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2.952

Source: Output Eviews9 (2025)

Based on the results of the Lagrange Multiplier test, the significant value for Both is 0.0003 where these result is smaller than the significance level value ($\alpha = 0.05$). In this case, it means that the best model used is the Random Effect Model (REM). In this case, based on the Chow test, Hausman test, and Lagrange multiplier Test, the dominant model is the Random Effect Model (REM), so the best model used is the Random Effect Model (REM).

Multiple Regression Analysis

Table 5. Regression Data Panel Analysis

Variable	Prediction	Coefficient	T-Statistic	Prob.
C		0.071	1.614	0.1177
IPI	+	-0.0205	-1.7861	0.0424*
IC	+	-0.0009	-0.1677	0.4340
OER	+	-0.0489	-1.1657	0.1268
NPF	-	-0.3846	-1.7778	0.0431*

Source: Output Eviews9 (2025)

The results of panel data regression estimation using the Random Effect Model (REM) show the results of testing with panel data regression, so from these results the following model equation is obtained.

$$ROA = 0.071731 - 0.020514 \cdot IPI - 0.000914 \cdot IC - 0.048924 \cdot OER - 0.384682 \cdot NPF$$

Coefficient of Determination Test

Table 6. Determination Coefficient Test

R-squared	0.328672	Mean dependent var	0.003331
Adjusted R-squared	0.232768	S.D. dependent var	0.006338
S.E. of regression	0.005552	Sum squared resid	0.000863
F-statistic	3.427098	Durbin-Watson stat	1.532010
Prob(F-statistic)	0.021153		

Source: Output Eviews9 (2025)

The R-squared value of 0.328672 indicates that 32.8% of the variation in Return on Assets (ROA) can be explained by the Islamicity Performance Index (Profit Sharing Ratio), Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing. Meanwhile, the remaining 76.73% is explained by other factors that were not included in this model but have been identified in previous studies, such as the Capital Adequacy Ratio (CAR), Zakat Performance Ratio, Equitable Distribution Ratio (EDR), Islamic Income Ratio, income diversification, competitive advantage, Good Corporate Governance, capital structure, Loan to Deposit Ratio, Total Assets Turnover, Financing to Deposit Ratio (FDR), and inflation.

Partial Test (T-Test)

Table 7. T test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.071731	0.044436	1.614266	0.1177
IPI	-0.020514	0.011485	-1.786103	0.0849
IC	-0.000914	0.005446	-0.167791	0.8680
OER	-0.048924	0.041969	-1.165725	0.2536
NPF	-0.384682	0.216373	-1.777861	0.0863

IPI: Islamicity Performance Index, IC: Intellectual Capital, OER: Operational Efficiency, NPF: Non-Performing Financing

Source: Output Eviews9 (2025)

The results of the test using the Random Effect Model (REM) can be concluded as follows:

1. Islamicity Performance Index with a probability value of $0.0849/2 = 0.04245 < 0.05$, can be interpreted that the Islamicity Performance Index variable has a negative effect and is statistically significant on Return on Assets.
2. Intellectual capital with a probability value of $0.8680/2 = 0.4340 > 0.05$, can be interpreted that the Intellectual capital variable has a negative effect and is statistically insignificant on Return on Assets.
3. Operational Efficiency Ratio with a probability value of $0.2536/2 = 0.1268 > 0.05$, can be interpreted that the Operational Efficiency Ratio variable has a negative effect and is statistically insignificant on Return on Assets.
4. Non-Performing Financing with a probability value of $0.0863/2 = 0.04315 < 0.05$, can be interpreted that the Non-Performing Financing variable has a negative effect and is statistically significant on Return on Assets.

DISCUSSIONS

Islamicity Performance Index (Profit Sharing Ratio) on Return on Assets

Based on partial testing (t-test) using the Random Effect Model (REM), the Islamicity Performance Index variable proxied by the Profit Sharing Ratio shows a coefficient value of -0.020514 with a probability value of 0.0849. Since this study applies a one-tailed hypothesis, the probability value is divided by two, resulting in $0.0849/2 = 0.04245$, which is smaller than the significance level of $\alpha = 5\%$ (0.05). Based on these statistical results, it can be stated that hypothesis one (H_1) is rejected. Therefore, it can be concluded that the Islamicity Performance Index proxied by the Profit Sharing Ratio has a negative and statistically significant effect on Return on Assets.

From a theoretical standpoint, this finding has important implications for Sharia Enterprise Theory. Although the theory emphasizes justice, transparency, and profit-sharing as core principles of Islamic banking accountability to Allah Subhanahu wa Ta'ala and stakeholders, the negative relationship between Profit Sharing Ratio and Return on Assets suggests that the practical implementation of these principles does not always translate into higher short-term profitability. Profit-sharing contracts such as mudharabah and musyarakah are inherently exposed to moral hazard and information asymmetry, as banks rely heavily on customers' reporting of business performance. To mitigate these risks, Islamic banks must implement intensive monitoring, supervision, and governance mechanisms, which increase operational costs and can suppress profitability in the short run.

Within the operational context of Islamic banks in Indonesia, this result reflects structural challenges faced by the industry. Operating in a dual banking system dominated by conventional banks, Islamic banks generally have smaller market shares and limited economies of scale. Consequently, profit-sharing financing often generates returns less efficiently than sale-based financing such as murabahah. As a result, although a higher Profit Sharing Ratio signals stronger compliance with sharia values, it may reduce Return on Assets due to higher monitoring costs, moral hazard mitigation efforts, and delayed financial returns.

This finding contradicts the studies Sari et al. (2025), which examined 12 Sharia Commercial Banks during the period 2018–2020, and the findings of Sharia Commercial Banks in Indonesia for the period 2017–2021, which were studied by Imsar et al. (2023), where their research results show that Islamicity Performance Index has a positive effect on Return on Assets. While the findings in this study are in line with Indrayani & Anwar (2022) which researched Sharia Commercial Banks for the period 2015–2020, from the results of their research stated that Islamicity Performance Index has a negative effect on Return on Assets.

Intellectual Capital on Return on Assets

Based on partial testing (t-test) using the Random Effect Model (REM), the Intellectual Capital variable shows a coefficient value of -0.000914 with a probability value of 0.8680. Since this study applies a one-tailed hypothesis, the probability value is divided by two, resulting in $0.8680/2 = 0.4340$, which is greater than the significance level of $\alpha = 5\%$ (0.05). Based on these statistical results, it can be stated that hypothesis two (H_2) is rejected. Therefore, it can be concluded that Intellectual Capital has a negative and statistically insignificant effect on Return on Assets (ROA).

In the Indonesian Sharia banking context, Investments in human capital development, information systems, and governance structures generally require substantial financial resources. Such investments tend to increase operational expenditures in the short term, as organizations allocate funds for employee training, technological upgrades, compliance mechanisms, and managerial improvements. However, the benefits of these investments are typically realized gradually over a longer time horizon rather than immediately, such as enhanced operational efficiency, greater innovation capacity, improved decision-making quality, and higher service standards. Consequently, an increase in intellectual capital may not directly translate into higher Return on Assets (ROA) within the observation period, particularly when organizations prioritize long-term capability building, risk control, and system strengthening over short-term profit maximization. This condition implies that the value created by intellectual capital is more strategic and sustainable in nature, yet less visible in accounting-based performance indicators in the short run.

These findings contradict those of Rosiana et al. (2020), which examined Banks listed on the Indonesia Stock Exchange from 2014 to 2017, and the findings of Bank BRI Syariah and Bank BTPN Syariah, which are included in the Jakarta Islamic Index 70 (JII70), which were studied by Hasibuan & Windari (2024), where their research results show that Intellectual Capital has a positive effect on Return on Assets. While the findings in this study are in line with Sepriani et al. (2024) which researched the cement sub-sector manufacturing companies listed on the IDX for the 2016–2020 period, from the results of their research stated that Intellectual Capital has a negative effect on Return on Assets.

Operational Efficiency Ratio on Return on Assets

Based on partial testing (t-test) using the Random Effect Model (REM), the Operational

Efficiency Ratio (OER) variable shows a coefficient value of -0.048924 with a probability value of 0.2536. Since this study applies a one-tailed hypothesis, the probability value is divided by two, resulting in $0.2536/2 = 0.1268$, which is greater than the significance level of $\alpha = 5\%$ (0.05). Based on these statistical results, it can be stated that hypothesis three (H_3) is rejected. Therefore, it can be concluded that the Operational Efficiency Ratio has a negative and statistically insignificant effect on Return on Assets (ROA).

In the Indonesian Sharia banking context, rising operational costs may reflect strategic expenditures related to branch expansion, digitalization initiatives, compliance with increasingly complex regulatory standards, and continuous service quality improvement. These expenditures are often undertaken as part of long-term strategic planning aimed at strengthening institutional capacity, expanding market reach, and enhancing competitiveness, rather than generating immediate financial returns. In the short term, such investments may increase the Operational Efficiency Ratio without directly contributing to profitability. Nevertheless, organizations may still be able to maintain Return on Assets (ROA) by leveraging income diversification strategies, including fee-based income, treasury activities, and other non-core operational revenues. As a result, an increase in Operational Efficiency Ratio does not necessarily indicate a deterioration in overall financial performance, but may instead reflect a transitional phase in which higher costs are incurred to support sustainable growth and operational resilience over time.

These findings contradict those of Situmorang et al. (2024), which examined Conventional commercial banks listed on the Indonesia Stock Exchange from 2019 to 2023, and the findings of Commercial banks listed on the Indonesia Stock Exchange for the period 2017-2021, which were studied by Sirait et al. (2023), where their research results show that Operational Efficiency Ratio has a positive effect on Return on Assets. While the findings in this study are in line with (Fatimah et al., 2024) which researched Kompas 100 indexed banks for 2018-2020, and also in the research Putri et al. (2023) which researched PT. Bank Negara Indonesia (Persero) Tbk for 2010-2020, from the results of their research stated that Operational Efficiency Ratio has a negative effect on Return on Assets.

Non-Performing Financing on Return on Assets

Based on partial testing (t-test) using the Random Effect Model (REM), the Non-Performing Financing (NPF) variable shows a coefficient value of -0.384682 with a probability value of 0.0863. Since this study applies a one-tailed hypothesis, the probability value is divided by two, resulting in $0.0863/2 = 0.04315$, which is smaller than the significance level of $\alpha = 5\%$ (0.05). Based on these statistical results, it can be stated that hypothesis four (H_4) is accepted. Therefore, it can be concluded that Non-Performing Financing has a negative and statistically significant effect on Return on Assets (ROA).

In the operational context of Islamic banks in Indonesia, high levels of Non-Performing Financing (NPF) indicate deteriorating asset quality and elevated financing risk, which directly lead to higher provisioning expenses and a reduction in income-generating capacity. Increased provisioning requirements constrain available funds that could otherwise be allocated to productive financing or investment activities, thereby weakening overall profitability. Moreover, Islamic banks face structural limitations in restructuring problematic financing due to strict sharia compliance requirements, which restrict the use of certain interest-based or penalty-driven restructuring mechanisms commonly applied in conventional banking. As a result, the resolution process for non-performing financing tends to be more complex, time-consuming, and cost-intensive. These conditions amplify the adverse impact of NPF on financial performance, making effective financing risk management through prudent credit assessment, continuous monitoring,

and early risk mitigation an essential factor in sustaining profitability and ensuring long-term financial stability.

This research is in line with the findings Ishak & Pakaya (2022) which state that Non-Performing Financing has a negative effect on Return on Assets, where the study examines Sharia Commercial Banks registered with Financial Services Authority for 2013 - 2020. However, unlike the findings Lestari et al. (2022) that researched PT. Bank Muamalat Indonesia period 2009 - 2021, where they found that Non-Performing Financing had a positive effect on Return on Assets.

CONCLUSIONS

1. Islamicity Performance Index (Profit Sharing Ratio) has a negative and statistically significant effect on Return on Assets
2. Intellectual Capital has a negative and statistically insignificant effect on Return on Assets
3. Operational Efficiency Ratio has a negative and statistically insignificant effect on Return on Assets
4. Non-Performing Financing has a negative and statistically significant effect on Return on Assets

Suggestion

1. Future researchers can consider incorporating other variables that have the potential to affect bank profitability (Return on Assets), such as corporate governance mechanisms, financing composition, capital adequacy, liquidity ratios, and macroeconomic variables. The inclusion of these variables is expected to provide a more comprehensive understanding of the determinants of profitability in Sharia banking.
2. Future studies may conduct comparative analyses between Sharia banks and conventional banks, or compare Sharia banks across different countries or regions, to examine whether the effects of Islamicity Performance Index, Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing on profitability differ across banking systems or institutional environments.
3. Future researchers can develop moderation or mediation models to further explore the relationship between Islamicity Performance Index (proxied by Profit Sharing Ratio), Intellectual Capital, Operational Efficiency Ratio, and Non-Performing Financing on Return on Assets. For example, corporate governance quality or bank size may act as moderating variables, while operational efficiency or risk management effectiveness may serve as mediating variables to better explain the indirect effects on profitability.
4. This research contributes to the Islamic banking literature by demonstrating that sharia-based performance indicators, intellectual capital investment, operational efficiency, and financing risk significantly shape bank profitability through complex cost-benefit trade-offs. The findings suggest that stronger sharia compliance and resource investment do not automatically enhance short-term financial performance, highlighting the importance of strategic alignment between ethical objectives, efficiency, and risk management.
5. From a managerial perspective, Islamic bank management is encouraged to adopt a more balanced strategy by optimizing profit-sharing financing through improved monitoring to reduce moral hazard, aligning intellectual capital investment with measurable productivity outcomes, controlling operational costs linked to strategic initiatives, and strengthening financing risk management to suppress Non-Performing Financing. Such an integrated approach is essential to sustain profitability and long-term financial stability.

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