

## Internal Determinants of Islamic Bank Profitability: A Cross-Country Panel Data Analysis

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### Abstract

Islamic banks face increasing pressure to sustain profitability amid post-pandemic structural changes. This study examines the effects of operational efficiency (CIR), capital adequacy (CAR), asset quality (NPF), firm size, and liquidity (FDR) on profitability (ROA) during 2022–2025. A quantitative approach was employed using panel data and the Fixed Effect Model (FEM) on 195 quarterly observations from 13 Islamic banks across nine countries. The sample was purposively selected from The Asian Banker's Top 100 Strongest Islamic Banks in the World based on data availability and regional representation. The findings reveal that all independent variables jointly explain 67.44% of the variation in ROA ( $F = 78.287$ ;  $p < 0.001$ ). Partially, CIR (coef. 1.006), CAR (coef. 7.747), and FDR (coef. 0.138) have positive and significant effects on ROA, indicating that operational efficiency, strong capital positions, and adequate liquidity are key drivers of profitability. In contrast, NPF (coef. -5.798) exerts a negative and significant effect, suggesting that deteriorating asset quality reduces bank earnings. Firm size shows no significant influence on profitability ( $p = 0.121$ ). These findings contribute to the cross-country Islamic banking literature and provide practical implications for regulators and bank managers in strengthening sustainable profitability.

[Bank syariah menghadapi tekanan yang semakin besar untuk mempertahankan profitabilitas di tengah perubahan struktural pascapandemi. Penelitian ini menganalisis pengaruh efisiensi operasional (CIR), kecukupan modal (CAR), kualitas aset (NPF), ukuran perusahaan, dan likuiditas (FDR) terhadap profitabilitas (ROA) bank syariah periode 2022–2025. Penelitian menggunakan pendekatan kuantitatif dengan data panel dan Fixed Effect Model (FEM) pada



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195 observasi triwulanan dari 13 bank syariah di sembilan negara. Sampel dipilih secara purposive dari daftar “Top 100 Strongest Islamic Banks in the World” versi The Asian Banker berdasarkan kelengkapan data dan representasi kawasan pasar utama perbankan syariah. Hasil penelitian menunjukkan bahwa seluruh variabel secara simultan menjelaskan 67,44% variasi ROA ( $F = 78,287$ ;  $p = 0,000$ ). Secara parsial, CIR (koef. 1,006), CAR (koef. 7,747), dan FDR (koef. 0,138) berpengaruh positif dan signifikan terhadap ROA, menunjukkan bahwa efisiensi operasional, kekuatan modal, dan likuiditas yang memadai menjadi pendorong utama profitabilitas. Sebaliknya, NPF (koef. -5,798) berpengaruh negatif dan signifikan, menegaskan bahwa penurunan kualitas aset dapat menekan laba. Ukuran perusahaan tidak berpengaruh signifikan ( $p = 0,121$ ), sehingga skala perusahaan tidak otomatis meningkatkan kinerja. Temuan ini memperkaya literatur perbankan syariah lintas negara dan memberikan implikasi praktis bagi regulator serta manajemen dalam memperkuat profitabilitas berkelanjutan.]

**Keywords:** Operational Efficiency, Capitalization, Asset Quality, Company Size, Liquidity, Profitability

## Introduction

The global Islamic banking industry has experienced significant expansion over the past two decades, marked by an increase in total assets from 2.70 trillion USD in 2020 to 3.88 trillion USD in 2024.<sup>1</sup> This has transcended the geographical boundaries of Muslim-majority countries and solidifies the position of Islamic banking as a relevant alternative financial system within the global economy.<sup>2</sup> Nevertheless, this asset expansion has not been fully accompanied by a uniform increase in profitability. IFSI data (2025) reveals a significant disparity in Return on Assets (ROA) across regions: South Asia recorded the highest ROA at 5,00%, while East Asia and Pacific reached only 1,20%. This disparity indicates that the profitability performance of Islamic banks is not solely determined by asset size but is influenced by a combination of internal factors and structural conditions of each region.

The COVID-19 pandemic marked a structural turning point for the global Islamic banking industry, fundamentally reshaping the operating environment in ways that persist well into the post-pandemic era. Unlike the gradual evolutionary pressures of prior decades, the pandemic simultaneously triggered financing quality deterioration, deposit volatility, liquidity stress, and compressed net margins across virtually all Islamic banking jurisdictions. Islamic banks were compelled to reassess their business models, moving away from a reliance on brick-and-mortar

<sup>1</sup> IFSI, “Islamic Financial Services Industry Stability Report 2025,” 2025, [www.ifsb.org](http://www.ifsb.org).

<sup>2</sup> Lina Kurniawati, Guntur Kusuma Wardana, and Muhammad Riza Hafizi, “The Effect of Liquidity, Leverage, Capital, Efficiency, and Asset Quality on Islamic Bank Profitability in Asia,” *FINANSIA: Jurnal Akuntansi Dan Perbankan Syariah* 8, no. 2 (November 24, 2025): 125–40, <https://doi.org/10.32332/finansia.v8i2.10454>.

intermediation toward digitally-enabled service delivery, automated risk monitoring, and more conservative liquidity management frameworks.<sup>3</sup> These structural adaptations have not been uniform across regions, however, and therein lies a critical source of cross-country variation that prior literature has insufficiently addressed. The Gulf Cooperation Council (GCC) countries represented in this study by Bahrain, Qatar, Saudi Arabia, and the UAE entered the post-pandemic period from a position of relative institutional strength, characterized by high capitalization ratios, robust regulatory infrastructure, and government-backed liquidity support mechanisms. In contrast, Southeast and South Asian markets such as Indonesia, Malaysia, Pakistan, and Sri Lanka faced more acute post-pandemic pressures stemming from weaker sovereign fiscal buffers, higher non-performing financing (NPF) ratios, and greater exposure to micro, small, and medium enterprise (MSME) financing segments that bore the brunt of pandemic-era economic disruptions. Turkey, as a unique case, confronted compounding challenges arising from macroeconomic instability and currency depreciation alongside post-pandemic recovery dynamics.<sup>4</sup> This GCC Southeast Asia gap in post-pandemic recovery trajectories implies that internal bank-level determinants of profitability may operate differently across these two distinct institutional environments, making cross-country comparative analysis not merely useful but empirically necessary.<sup>5</sup>

Beyond the regional divergence, the pandemic has fundamentally altered the relative importance of internal versus external determinants of Islamic bank profitability. In the pre-pandemic environment, macroeconomic variables such as GDP growth rates, inflation, and interest rate cycles exerted dominant influence on bank performance, effectively masking idiosyncratic differences in managerial efficiency and internal risk governance. The post-pandemic landscape has reversed this dynamic: synchronized global economic disruption, extraordinary monetary easing, and the normalization of digital financial services have collectively diminished the explanatory power of macro-level factors while elevating the strategic significance of bank-specific capabilities.<sup>6</sup> Specifically, operational efficiency the ability to control costs in the context of digitalization-driven investments has become a critical differentiator, as Islamic banks that successfully adopted financial technology (fintech) integration and automated back-office

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<sup>3</sup> Ghulam Ghouse et al., "Performance of Islamic vs Conventional Banks in OIC Countries: Resilience and Recovery during Covid-19," *Borsa Istanbul Review* 22 (December 2022): S60–78, <https://doi.org/10.1016/j.bir.2022.11.020>.

<sup>4</sup> Ahmad Ulil Albab Al Umar and Slamet Haryono Haryono, "Kinerja Keuangan Bank Syariah: Perbandingan Studi Dari Indonesia, Malaysia, Arab Saudi Dan United Emirates Arab," *Owner* 6, no. 2 (April 3, 2022): 1830–40, <https://doi.org/10.33395/owner.v6i2.822>.

<sup>5</sup> Ahsan Putra Hafiz, M Maulana Hamzah, and Seri Jana Juanda Safitri, "Pengaruh Rasio CAR, FDR, BOPO Dan NPF Terhadap ROA Bank Umum Syariah Di Indonesia Periode 2021–2023," *Margin: Journal Of Islamic Banking* 5, no. 1 (2025).

<sup>6</sup> Raedi Raedi et al., "Pengaruh Faktor Internal Dan Terhadap Profitabilitas Umum Syariah Di Indonesia 2015–2020," *Jurnal Visioner & Strategis* 12, no. 2 (2023).

processes demonstrated superior cost management compared to those relying on legacy infrastructure. Capital adequacy has taken on heightened significance as a buffer against post-pandemic credit losses and regulatory tightening under Basel III-aligned frameworks. Asset quality, proxied by NPF, emerged as a particularly sensitive indicator given the widespread financing restructuring and moratorium programs enacted during 2020–2021, whose deferred credit risks have only become fully apparent in the 2022–2025 observation window. Liquidity management, measured by the Financing-to-Deposit Ratio (FDR), has similarly gained urgency as central banks across Islamic banking jurisdictions began normalizing monetary policy following pandemic-era quantitative easing, creating more volatile funding conditions.<sup>7</sup> This post-pandemic elevation of internal determinants constitutes a compelling justification for studying the 2022–2025 period specifically, as this window captures the real behavioral and financial consequences of pandemic-driven structural transformation rather than the temporary policy-distorted environment of 2020–2021.<sup>8</sup>

Considering the cross-country structure of the data, this study applies the Fixed Effect Model (FEM) to account for unobservable heterogeneity across Islamic banks operating under different regulatory and institutional environments. This approach enables a more accurate estimation of the relationship between bank-specific variables and profitability by controlling for country-specific and institution-specific characteristics that remain relatively constant over time. The application of FEM is particularly relevant in the post-pandemic period, where structural differences across jurisdictions may influence the financial performance of Islamic banks differently.<sup>9</sup>

Various internal factors have been shown to play a role in shaping the profitability of Islamic banking. Operational efficiency, measured by the Cost-to-Income Ratio (CIR), reflects a bank's ability to control costs relative to the income generated. Capital adequacy, proxied by the Capital Adequacy Ratio (CAR), varies across regions from 13% in Sub-Saharan Africa to 25% in South Asia. Asset quality, measured by Non-Performing Financing (NPF), is a particular concern in the MENA and ECA regions, where NPF has reached the 5% threshold. Company size, measured by the natural logarithm of total assets, continues to increase consistently; however, excessive scale growth has the potential to lead to diseconomies of scale.

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<sup>7</sup> Fika Azmi, Nugroho Heri Pramono, and Mirasanti Wahyuni, "AnalisisTingkat Kesehatan Bank Syariah Menghadapi Pandemi COVID-19," *Jurnal Ilmiah Ekonomi Islam* 7, no. 3 (2021).

<sup>8</sup> Meisha Fatma Wijaya et al., "Analisis Pengaruh Faktor Internal Terhadap Profitabilitas Bank Syariah Indonesia (BSI) Periode 2013-2022," *Al Itmamiy Jurnal Hukum Ekonomi Syariah (Muamalah)* 5, no. 1 (May 20, 2023): 65–75, <https://doi.org/10.55606/ai.v5i1.316>.

<sup>9</sup> Ike Dwi Astuti and Nur Kabib, "Faktor-Faktor Yang Mempengaruhi Profitabilitas Bank Syariah Indonesia Dan Malaysia," *Jurnal Ilmiah Ekonomi Islam* 7, no. 2 (July 5, 2021), <https://doi.org/10.29040/jiei.v7i2.2534>.

Meanwhile, liquidity, proxied by the Financing to Deposit Ratio (FDR), varies from 47% in Sub-Saharan Africa to 96% in East Asia and the Pacific.<sup>10</sup>

Several previous studies have examined the determinants of Islamic bank profitability; however, the findings remain inconsistent across different variables and research contexts. Regarding operational efficiency, studies by Kurniawati (2025), dan Kumalasari & Hersugondo (2020) found that the Cost-to-Income Ratio (CIR) has a significant effect on Return on Assets (ROA), whereas Yuni (2024) reported no significant relationship. Concerning capital adequacy, Hafiz et al. (2025) and Maknuun et al. (2024) revealed that the Capital Adequacy Ratio (CAR) positively influences profitability, while Wardana & Lestari (2025) dan Yayan & Putri (2024) concluded that CAR does not significantly affect ROA. Similar inconsistencies were also identified in the Non-Performing Financing (NPF) variable, where Rofi'uddin (2025) and Rosiyanti et al. (2024) demonstrated a significant negative effect on profitability, whereas Syamsi & Bawono (2024) found insignificant results. Furthermore, studies examining firm size also produced mixed findings. Chotijah & Fuadati (2018) and Humairah et al. (2023) argued that larger bank size contributes positively to profitability due to economies of scale and broader market access, while Rahmadani & Wijayanti (2024) suggested that excessive asset growth may instead reduce efficiency and profitability. In terms of liquidity, represented by the Financing-to-Deposit Ratio (FDR), Nafi'ah et al. (2024) and Rosiyanti et al. (2024) found that FDR significantly affects Islamic bank profitability, whereas Kusumaningrum & Maika (2024) reported an insignificant relationship. These inconsistencies are largely attributable to differences in research settings, observation periods, sample characteristics, and the limited scope of prior studies, most of which focused on single-country analysis or specific Islamic banking institutions.

The urgency of cross-country research is further amplified by the post-pandemic context. Studies conducted before 2020 captured profitability dynamics under relatively stable macroeconomic conditions and conventional business models, and their findings cannot be assumed to hold in a fundamentally restructured post-pandemic environment where digital transformation, heightened credit risk, and evolving regulatory requirements have redefined competitive advantage. The 2022–2025 period represents a critical observation window precisely because it captures the downstream effects of pandemic-induced structural changes after emergency policy interventions financing moratoriums, regulatory forbearance, and liquidity injection programs have been phased out, leaving internal bank characteristics as the primary determinants of profitability divergence. Moreover, the absence of multi-jurisdictional studies spanning both GCC and Southeast Asian markets means that the existing literature cannot account

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<sup>10</sup> IFSI, "Islamic Financial Services Industry Stability Report 2025."



for how regional institutional differences moderate the relationship between internal variables and performance outcomes. A cross-country panel approach covering nine countries across three distinct Islamic banking regions therefore fills a critical empirical void, providing policymakers and bank management with generalizable insights that single-country studies are structurally incapable of delivering.

Based on this research gap, this study aims to analyze the influence of CIR, CAR, NPF, firm size, and FDR on the profitability (ROA) of Islamic banks across countries during the 2022–2025 period, including both partial and simultaneous tests. The scientific contribution of this study lies in expanding the scope of analysis from the single-institution level to the cross-country level, as well as the use of a post-pandemic period, which makes the findings more current and applicable for policymakers and global Islamic banking management.

## Methodology

This study employs a quantitative research design using panel data regression to examine the effects of operational efficiency, capital adequacy, asset quality, firm size, and liquidity on the profitability of Islamic banks across countries during the post-pandemic period of 2022–2025. Panel data regression is appropriate for cross-country banking studies because it captures both unobserved country-specifics heterogeneity and time variation, producing more efficient estimates in explaining bank profitability than pure cross-sectional or time-series models.<sup>11</sup> The data used is secondary data sourced from audited quarterly financial reports officially published by each Islamic bank, covering 195 quarterly observations from the first quarter of 2022 through the third quarter of 2025.

The population of this study consists of Islamic banks listed in The Asian Banker's "Top 100 The Strongest Islamic Banks in the World". This ranking was selected because it is internationally recognized and evaluates Islamic banks using multidimensional indicators such as capital strength, profitability, asset quality, liquidity, and risk management performance.<sup>12</sup> The sampling technique used was purposive sampling with four main criteria: (1) consistently ranked in the Top 100 during the study period, (2) publishing quarterly financial reports, (3) including the two Islamic banks with the highest assets in each country, and (4) having complete data for all variables. From the initial 100 Islamic banks, 87 institutions were excluded due to incomplete data, resulting in a final sample of 13 Islamic banks from nine countries that reflect the regional diversity of the global Islamic banking industry, ranging from the GCC region, Southeast and South Asia, to Turkey.

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<sup>11</sup> Ade Ghofir<sup>1</sup> et al., "Financial and Marketing Determinants of Banking Performance in Indonesia: A Systematic Literature Review. Ade Ghofir et al. Financial and Marketing Determinants of Banking Performance in Indonesia: A Systematic Literature Review," *Jurnal Multidisiplin Sahombu* 6, no. 02 (2026): 442–53.

<sup>12</sup> TAB, "Strongest Islamic Banks," 2025.

**Table 1**  
**List of Cross-Country Islamic Bank Samples**

| No. | Islamic Bank                   | Country      |
|-----|--------------------------------|--------------|
| 1.  | Kuwait Finance House           | Bahrain      |
| 2.  | Bank Aceh Syariah              | Indonesia    |
| 3.  | Bank Muamalat Indonesia        | Indonesia    |
| 4.  | Hong Leong Islamic Bank        | Malaysia     |
| 5.  | Dubai Islamic Bank Pakistan    | Pakistan     |
| 6.  | Dukhan Bank                    | Qatar        |
| 7.  | Qatar Islamic Bank             | Qatar        |
| 8.  | Alinma Bank                    | Saudi Arabia |
| 9.  | Al Rajhi Bank                  | Saudi Arabia |
| 10. | Amana Bank                     | Sri Lanka    |
| 11. | Al Baraka Turk Katilim Bankasi | Turkey       |
| 12. | Kuveyt Turk Katilim Bankasi    | Turkey       |
| 13. | Abu Dhabi Islamic Bank         | UAE          |

*Source: Data compiled by the research, 2026*

Data analysis was conducted using panel data regression with EViews 13 software. The selection of the most appropriate estimation model was determined through the Chow test and Hausman test, both of which indicated that the Fixed Effect Model (FEM) was the most suitable estimation approach. FEM is widely recommended in cross-country banking research because it effectively controls for unobservable bank-specific characteristics that may remain constant over time yet influence profitability outcomes.<sup>13</sup> Prior to hypothesis testing, several diagnostic tests were conducted to ensure the robustness of the regression model, including normality, multicollinearity, heteroscedasticity, and autocorrelation tests. All diagnostic results confirmed that the regression model satisfied the required assumptions and was appropriate for further estimation.<sup>14</sup> Hypothesis testing was performed using partial significance tests (t-test), simultaneous significance tests (F-test), and the coefficient of determination ( $R^2$ ) to evaluate the explanatory power of the independent variables on profitability.<sup>15</sup>

<sup>13</sup> Badi H Baltagi, *Econometric Analysis of Panel Data*, 2005.

<sup>14</sup> Damodar N Gujarati, *Basic Econometrics*, 2009.

<sup>15</sup> Imam Ghozali, *Analisis Multivariat Dan Ekonometrika*, 2017.

### The Result of the Descriptive Statistical Analysis

Descriptive statistics are used as a statistical method to describe and summarize the characteristics of the data being analyzed so that it is easier to understand without making generalizations beyond the available data. According to,<sup>16</sup> descriptive statistics is a method for analyzing relationships between variables through correlation, making predictions using regression analysis, and comparing the mean values of sample or population data.

**Table 2**  
**Descriptive Statistic of Research Variables**

| Variable  | Minimum   | Maximum  | Mean      | Std. Dev | Observation |
|-----------|-----------|----------|-----------|----------|-------------|
| CIR       | -0.957267 | 0.166823 | -0.369611 | 0.216508 | 195         |
| CAR       | 0.061716  | 0.294505 | 0.182473  | 0.039425 | 195         |
| NPF       | 0.000453  | 0.064754 | 0.024329  | 0.017053 | 195         |
| Firm Size | 17.07813  | 19.89098 | 18.57392  | 0.770559 | 195         |
| FDR       | -4.110999 | 8.289731 | 1.733636  | 2.278012 | 195         |
| ROA       | 0.020000  | 3.820000 | 1.546859  | 0.831791 | 195         |

Source: Eviews 13 data analysis result, 2026

Table 2 show that the descriptive statistical analysis yielded the following data:

- a. For the CIR variable, the minimum value was -0.957267, the maximum value was 0.166823, and the mean was -0.369611, with a standard deviation of 0.216508. This indicates that the CIR is heterogeneous, as the standard deviation is greater than the mean (in absolute terms), suggesting significant variation among observations.<sup>17</sup>
- b. For the CAR variable, the minimum value is 0.061716, the maximum value is 0.294505, and the mean is 0.182473, with a standard deviation of 0.039425. This indicates that the CAR is homogeneous, since the standard deviation is less than the mean, meaning the data tends to be uniform and does not vary significantly across observations.<sup>18</sup>
- c. For the NPF variable, the minimum value is 0.000453, the maximum value is 0.064754, and the mean is 0.024329 with a standard deviation of 0.017053. This indicates that NPF is homogeneous, as the standard deviation is less than the mean, suggesting a relatively uniform level of non-performing financing across the companies studied.<sup>19</sup>

<sup>16</sup> Sugiyono Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D*, 2020.

<sup>17</sup> Gujarati, *Basic Econometrics*.

<sup>18</sup> Gujarati.

<sup>19</sup> Gujarati.



- d. For the Firm Size variable, the minimum value is 17.07813, the maximum value is 19.89098, and the mean is 18.57392 with a standard deviation of 0.770559. This indicates that Firm Size is homogeneous, as the standard deviation is less than the mean, meaning the firm sizes in the study sample are relatively uniform.<sup>20</sup>
- e. For the FDR variable, the minimum value is -4.110999, the maximum value is 8.289731, and the mean is 1.733636, with a standard deviation of 2.278012. This indicates that FDR is heterogeneous, as the standard deviation is greater than the mean, suggesting a significant variation in the level of third-party funding among the companies studied.<sup>21</sup>

For the ROA variable, the minimum value is 0.020000, the maximum value is 3.820000, and the mean is 1.546859 with a standard deviation of 0.831791. This indicates that ROA is homogeneous, as the standard deviation is less than the mean, meaning that the profitability levels of the companies in the study sample are relatively uniform and do not vary significantly across observations.<sup>22</sup>

### Chow and Hausman Test

**Table 3**

**Chow and Hausman Test**

| Effect Test     | Statistics | Df       | Prob   |
|-----------------|------------|----------|--------|
| Cross-section F | 49.076168  | (12.177) | 0.0000 |

Source: Data processed with Eviews 13, 2026

**Table 4**

**Chow and Hausman Test**

| Test Summary          | Chi-Sq. Statistic | Chi-Sq. df | Prob.  |
|-----------------------|-------------------|------------|--------|
| Random cross-sections | 178.296616        | 5          | 0.0000 |

Source: Data processes with Eviews 13, 2026

Model selection procedures using the Chow and Hausman tests indicated that the Fixed Effect Model (FEM) was the most appropriate estimation approach for the panel structure. The Chow test produced a probability value of 0.0000, while the Hausman test also yielded a probability value of 0.0000, confirming the suitability of FEM for estimating the cross-country panel data model.<sup>23</sup>

<sup>20</sup> Gujarati.

<sup>21</sup> Gujarati.

<sup>22</sup> Gujarati.

<sup>23</sup> Gujarati.

**Classical Assumption Test**

**Table 5**  
**Result of the Normality Test**

|             |          |
|-------------|----------|
| Jarque Bera | 1.715116 |
| Probability | 0.424197 |

*Source: Data processed using Eviews 13, 2026*

**Table 6**  
**Result of the Multicollinearity Test**

| Variabel                      | VIF      |
|-------------------------------|----------|
| Efisiensi Operasional (CIR)   | 1.401856 |
| Permodalan (CAR)              | 1.369424 |
| Kualitas Aset (NPF)           | 1.056917 |
| Ukuran Perusahaan (Firm Size) | 1.155071 |
| Likuiditas (FDR)              | 1.314070 |

*Source: Data processed using Eviews 13, 2026*

**Table 7**  
**Result of the Heteroscedasticity Test**

| Variable       | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------------|-------------|------------|-------------|--------|
| C              | 0.370127    | 0.378105   | 0.978900    | 0.3289 |
| (CIR) X1       | 0.089948    | 0.082642   | 1.088401    | 0.2778 |
| (CAR) X2       | 0.273276    | 0.448583   | 0.609199    | 0.5431 |
| (NPF) X3       | 1.501578    | 0.911107   | 1.648080    | 0.1010 |
| (FIRM SIZE) X4 | -0.007747   | 0.021079   | -0.367514   | 0.7136 |
| (FDR) X5       | 0.005727    | 0.007605   | 0.753020    | 0.4524 |

*Source: Data processed using Eviews 13, 2026*

**Table 8**  
**Result of the Autocorrelation Test**

| Test               | DW       |
|--------------------|----------|
| Durbin-Watson stat | 1.917257 |

*Source: Data processed using Eviews 13, 2026*

Classical assumption tests were conducted to ensure model robustness. The Jarque-Bera probability value exceeded 0.05, indicating normally distributed residuals. All VIF values remained below 10, confirming the absence of multicollinearity. The Glejser test showed insignificant probability values for all independent variables, indicating no heteroscedasticity problem. In addition, the Durbin-Watson statistic fell within the acceptable range, confirming that the model was free from autocorrelation. These results indicate that the regression model satisfies the classical assumption requirements and is appropriate for further estimation using the Fixed Effect Model.<sup>24</sup>

<sup>24</sup> Gujarati.

## Hypothesis Test

**Table 9**  
**Result of the Partial Test (t-test)**

| Variable       | Coefficient | t-Statistic | Prob.  |
|----------------|-------------|-------------|--------|
| C              | -1.730360   | -2.003217   | 0.0466 |
| (CIR) X1       | 1.005514    | 5.325880    | 0.0000 |
| (CAR) X2       | 7.747290    | 7.559812    | 0.0000 |
| (NPF) X3       | -5.797800   | -2.785463   | 0.0059 |
| (FIRM SIZE) X4 | 0.075057    | 1.558669    | 0.1207 |
| (FDR) X5       | 0.137773    | 7.929994    | 0.0000 |

Source: Data processed using with Eviews 13, 2026

Based on the regression results, hypothesis testing was conducted using a significance level of 5 percent, where a p-value below 0.05 indicates a significant effect, while a p-value above 0.05 indicates no significant effect.<sup>25</sup>

- Operational Efficiency (CIR) obtained a probability value of  $0.0000 < 0.05$ , so H1 is accepted. CIR is proven to have a significant partial effect on the profitability (ROA) of cross-country islamic banks.
- Capital Adequacy Ratio (CAR) shows a probability value of  $0.0000 < 0.05$ , so H2 is accepted. This indicates that CAR has a significant partial effect on the profitability (ROA) of cross-country islamic banks.
- Asset Quality (NPF) has a probability value of  $0.0059 < 0.05$ , so H3 is accepted. NPF is proven to have a significant partial effect on the profitability (ROA) of cross-country islamic banks.
- Firm Size recorded a probability value of  $0.1207 > 0.05$ , so H4 is rejected. This means that firm size does not have a significant partial effect on the profitability (ROA) of cross-country islamic banks.
- Liquidity (FDR) yielded a p-value of  $0.0000 < 0.05$ , so H5 is accepted. FDR was found to have a significant partial effect on the profitability (ROA) of Islamic banks across countries.

**Table 10**  
**Result of the Simultaneous Test (F-test)**

|                    |          |
|--------------------|----------|
| F-statistic        | 78.28697 |
| Prob (F-statistic) | 0.000000 |

Source: Data processed using with Eviews 13, 2026

Based on Table 10, the probability value of the F-statistic is  $0.000000 < 0.05$ , so H<sub>6</sub> is accepted. These results prove that CIR, CAR, NPF, Firm Size, and FDR simultaneously have a significant effect on the profitability (ROA) of cross-country islamic banks.<sup>26</sup>

<sup>25</sup> Gujarati.

<sup>26</sup> Gujarati.

**Table 11**  
**Result of the Coefficient of Determination Test**

|                    |          |
|--------------------|----------|
| R-Squared          | 0.674382 |
| Adjusted R-squared | 0.665768 |

Source: Data processed using with Eviews 13, 2026

Based on Table 11, the R-squared value of 0.6744 or 67.44% indicates that the variables CIR, CAR, NPF, Firm Size, and FDR account for 67.44% of the variation in ROA, while the remaining 32.56% is influenced by other factors not included in this research model.<sup>27</sup>

### **The Effect of Operational Efficiency (CIR) on Profitability (ROA) of Cross-Country Islamic Banks (H1)**

The Cost to Income Ratio (CIR) exerts a positive and significant effect on ROA ( $\beta = 1.0055$ ,  $p = 0.0000$ ), confirming H1. This counterintuitive direction is explained by the nature of strategic operational investment in the study period: across the 13 sample banks, elevated operating costs are predominantly attributable to digital transformation programmes, Sharia-compliant product development, and financial inclusion initiatives in underbanked markets expenditures that generate lagged revenue gains rather than contemporaneous waste.<sup>28</sup> Agency theory cautions that managerial discretion over budgets can produce cost escalation absent governance mechanisms; however, the dual-layer oversight of Sharia Supervisory Boards and conventional audit committees in Islamic banks provides precisely the structural check that constrains empire-building and channels spending toward legitimate strategic purposes.

Regional dynamics sharpen this interpretation. GCC banks such as Al Rajhi Bank and Qatar Islamic Bank have undertaken ambitious digital transformation programmes since 2022 investing in AI-driven credit scoring and open-banking API integrations that temporarily inflate CIR while measurably expanding fee-based income within two to three quarters.<sup>29</sup> By contrast, Indonesian banks in the sample, Bank Aceh Syariah and Bank Muamalat Indonesia, have channelled operational resources into Sharia-compliant microfinancing field networks in rural communities, raising CIR in the short term while building a loyal depositor base in previously underserved regions.<sup>30</sup> These findings are consistent with Antwi (2019)

<sup>27</sup> Gujarati.

<sup>28</sup> Siti Muallifatus Syifa, "Pengaruh Non Performing Financing, Pendapatan Operasional Dan Beban Operasional Terhadap Profitabilitas Pada Bank Umum Syariah Di Indonesia Periode 2015-2021," *JURNAL MUAMALAT INDONESIA - JMI* 2, no. 2 (October 31, 2022), <https://doi.org/10.26418/jmi.v2i2.58176>.

<sup>29</sup> Yudhistira Ardana, Anggita Nur Khofifah, and Dewi Puji Lestari, "Dynamics of Islamic Banks in the Digital Transformation Era," *Jurnal Al-Mashrof: Islamic Banking and Finance* 4, no. 1 (2023), <http://ejournal.radenintan.ac.id/index.php/almashrof>.

<sup>30</sup> Farida Ayu Avisena Nusantara, "Analisis Perkembangan Dan Prospek Lembaga Microfinance Syariah Di Periode 2025-2030," *JLBM: Jurnal Lentera Manajemen Keuangan*, no. 2 (2024).

on Ghana Islamic banks and Dsouza et al. (2022) on the India Islamic banking sector, both of which confirm the significant positive influence of CIR on profitability when operational spending is growth-oriented rather than inefficiency-driven.

From the Islamic ethical perspective, the distinction operative here is not between efficiency and inefficiency, but between israf (wastefulness, prohibited in Surah Al-A'raf 7:31) and infaq fi sabil al-khair al-ijtima'i (purposeful expenditure for social benefit).<sup>31</sup> When Bank Aceh Syariah invests in rural microfinance field agents, the elevated CIR embodies the maqasid al-Shariah principle of hifz al-mal at the communal level not waste, but infaq. Sharia Supervisory Boards should therefore formally evaluate CIR increases against this criterion, treating expenditure quality as a Sharia governance matter rather than a purely financial KPI.<sup>32</sup>

### **The Effect of Capital Adequacy (CAR) on Profitability (ROA) of Cross-Country Islamic Banks (H2)**

CAR is the single most powerful explanatory variable in the model ( $\beta = 7.7473$ ,  $p = 0.0000$ ), confirming H2 and establishing capital strength as the foundational anchor of profitability across all nine countries in the sample. Capital Buffer Theory accounts for this dominance through a self-reinforcing cycle: stronger capital reduces the bank's cost of funding by lowering risk premiums demanded by depositors and interbank counterparties, while simultaneously providing the regulatory headroom to expand risk-weighted financing activities and retain earnings.<sup>33</sup> In a cross-country Islamic banking context, this mechanism is amplified by heterogeneous regulatory requirements minimum CAR thresholds range from 8% in Turkey (Basel III transitional) to 16% in Saudi Arabia (SAMA conservative macro-prudential stance, IFSI 2025) meaning that banks operating above minimum requirements possess a strategic flexibility that their capital-constrained peers cannot replicate.<sup>34</sup>

Three distinct regional channels mediate this relationship. In the GCC, high-CAR banks such as Alinma Bank and Al Rajhi Bank maintaining ratios above 20% deploy their capital headroom into high-yielding corporate and real estate financing in a stable macroeconomic environment, producing ROA figures consistently above

<sup>31</sup> Alifah Fauziah, Mustopa Kamal, and Hasan Bisri, "Tafsir Teks Al-Qur'an Tentang Konsep 'Infak Dan Sadaqah' Dalam Sistem Ekonomi Syari'ah," *Iqtishaduna: Jurnal Ilmiah Mahasiswa Hukum Ekonomi Syariah* 8, no. 2 (March 2026): 106–28, <https://doi.org/10.23917/jisel.v8i01.7371>.

<sup>32</sup> Kuratul Aini et al., "Keberadaan Prinsip (Maqashid Al-Syariah) Hifdzul Mal Dalam Kegiatan Investasi Konvensional Non Maisir," *INVESTAMA: Jurnal Ekonomi Dan Bisnis*, no. 2 (2023), <https://www.hsbc.co.id/1/jenis-jenis>.

<sup>33</sup> Zenny Nurul Aini Azhari and Rendra Erdkhadifa, "Factors Affecting Capital Buffer in Indonesia Islamic Banking by Panel Regression Approach," *Jurnal Maharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah* 10, no. 4 (2025), <https://doi.org/10.30651/jms.v10i4.27564>.

<sup>34</sup> Nurul Hikmah and Nur Hishaly, "Strategi Adaptif Perbankan Syariah Menghadapi Ketidakstabilan Ekonomi Global Pasca Krisis," *Jurnal Inovasi Penelitian, Karya Ilmiah Dan Pengembangan* 3 (2025).



2%.<sup>35</sup> In Turkey, where monetary policy rates oscillated between 8.5% and 45% during 2022–2024, CAR functions primarily as a survival mechanism rather than a growth lever: banks with stronger buffers absorbed mark-to-market losses on fixed-rate financing portfolios during rate spike episodes without forced deleveraging.<sup>36</sup> In South and Southeast Asian markets (Indonesia, Malaysia, Pakistan, Sri Lanka), strong CAR operates through a depositor trust channel since Profit-Sharing Investment Account (PSIA) holders retain the right to withdraw funds upon perceived institutional risk, banks with visible capital strength attract more stable, lower-cost PSIA funding, which directly widens financing margins and lifts ROA.<sup>37</sup> These findings are consistent with Subekti & Wardana (2022), Alnajjar & Othman (2021), Sapitri & Irawan (2023) and Moustapha & Benziane (2022), who also confirm the significant positive effect of CAR on Islamic bank profitability. Regulators in South Asian markets, where average CAR hovers near minimums, should consider differential capital relief for banks demonstrating sustained Sharia compliance quality as a means of simultaneously incentivising capital accumulation and strengthening sector resilience.<sup>38</sup>

The Islamic normative framework elevates this empirical finding to a matter of religious obligation. The Quran's parable in Surah Al-Baqarah (2:261) of a seed that multiplies exponentially when cultivated in the right conditions images the productive management of capital as a divine trust. The Prophet's instruction "Safeguard your wealth, for it is the support of your life" (al-Bayhaqi) articulates *hifz al-mal* one of the five *maqasid al-Shariah* codified by al-Ghazali as the religious rationale for maintaining adequate capital.<sup>39</sup> Sharia boards must champion capital strengthening as both fiduciary duty and religious responsibility, embedding CAR targets in Sharia performance scorecards alongside financial KPIs.<sup>40</sup>

<sup>35</sup> Wafa Syakila Herdani et al., "Analisis Manajemen Permodalan Bank Syariah Melalui Pendekatan Adequacy Ratio (CAR), Aset Tertimbang Menurut Risiko(ATMR), Dan Kualitas Aktiva Produktif (KAP)," *Jurnal Ekonomi Manajemen Dan Bisnis* 3, no. 4 (2026).

<sup>36</sup> Republic of Turkey, "Republic Of Türkiye 4 International Monetary Fund," 2023.

<sup>37</sup> Ahmet F Aysan et al., "Are Islamic Banks Subject to Depositor Discipline? Are Islamic Banks Subject to Depositor Discipline?," 2013, <http://ssrn.com/abstract=2370444>Electroniccopyavailableat:<http://ssrn.com/abstract=2370444> D/2013/7012/42<https://ssrn.com/abstract=2370444>Electroniccopyavailableat:<http://ssrn.com/abstract=2370444>Electroniccopyavailableat:<http://ssrn.com/abstract=2370444>.

<sup>38</sup> Nihal Touti and Asmaa Alaoui Taïb, "Research Status and Prospects of Shariah Compliance Impact on Firm Risk, Performance and Resilience," *Journal of Islamic Monetary Economics and Finance* 10, no. 4 (2024): 679–708, <https://doi.org/10.21098/jimf.v10i4.2152>.

<sup>39</sup> Touti and Taïb.

<sup>40</sup> Guntur Kusuma Wardana and Renita Diyana Lestari, "The Profitability of Islamic Banking in the World: Liquidity, Company Size, and Capital Adequacy," *Indonesian Journal of Banking and Financial Technology* 3, no. 3 (July 30, 2025): 245–58, <https://doi.org/10.55927/fintech.v3i3.70>.

### **The Effect of Asset Quality (NPF) on Profitability (ROA) of Cross-Country Islamic Banks (H3)**

Non-Performing Financing exhibits a negative and statistically significant relationship with ROA ( $\beta = -5.7978$ ,  $p = 0.0059$ ), confirming H3. Credit Risk Theory identifies three compounding channels: the direct income effect (non-performing financing ceases to generate profit-sharing income); the provisioning effect (loan loss reserves reduce pre-tax income); and the capital effect (sustained NPF accumulation erodes equity, constraining future financing capacity).<sup>41</sup> In Islamic banking, these channels carry an additional structural penalty conventional penalty interest and compound late charges are Sharia-prohibited, leaving only charitable ta'widh arrangements that provide no direct income recovery to the bank.<sup>42</sup> This asymmetry explains the large negative coefficient, which substantially exceeds NPF coefficients reported in comparable studies of conventional banks Wardana & Abdani (2023), and is consistent with the findings of Awintasari & Nurhidayati (2021) dan Prihatin (2024).

Cross-regional variation is instructive. GCC banks in the sample Abu Dhabi Islamic Bank, Alinma Bank, Al Rajhi Bank, and Dukhan Bank maintained NPF ratios averaging 1.5–3.0% during 2022–2025, supported by oil-revenue-driven economic recovery and robust collateral enforcement infrastructure.<sup>43</sup> Qatar Islamic Bank sustained NPF below 2%, benefiting from post-FIFA World Cup 2022 economic momentum that sustained real estate and hospitality financing quality.<sup>44</sup> Turkish Islamic banks faced distinctly harsher conditions: hyperinflation peaking above 80% in 2022 and Lira depreciation of over 40% against the USD collectively collapsed real borrower creditworthiness, driving NPF higher and directly suppressing ROA.<sup>45</sup> South Asian banks in Pakistan and Sri Lanka both experiencing sovereign debt distress episodes in 2022–2023 recorded elevated NPF ratios driven by macroeconomic deterioration rather than poor underwriting discipline.<sup>46</sup> For these institutions, NPF management demands macro-level responses: geographic and sectoral financing diversification, wa'ad-based currency hedging instruments, and

<sup>41</sup> Taudlikhul Afkar et al., "Profit Sharing System in Islamic Banking Before, During, and After Covid-19 Pandemic, Any Moderation?," *Journal of Accounting and Strategic Finance* 8, no. 1 (June 30, 2025): 50–73, <https://doi.org/10.33005/jasf.v8i1.569>.

<sup>42</sup> Salsa Dela Maruly, "Risk Management in Sharia Financing: Credit Risk Analysis in Murabahah Financing in Islamic Banking in Surabaya," *Jurnal Ilmiah Manajemen Kesatuan* 11, no. 3 (2023): 1161–68.

<sup>43</sup> ADIB, *Racing to What's Next*, 2025.

<sup>44</sup> QIB, *Results Presentation Jun 2025*, 2025.

<sup>45</sup> Muhammad Bagus Saputro and Satriyawan Wahyudi, "Kebijakan Anti-Riba Di Turki: Tinjauan Konsep Al-Hisbah Dalam Kebijakan Ekonomi Recep Tayyip Erd," *Journal of Society and Scientific Studies* 1, no. 2 (2025): 9–18, <https://journal.scientiva.org/scientiva/index>.

<sup>46</sup> Nova Adella et al., "Utang Luar Negeri: Menelisik Faktor Penyebab, Kondisi Di Indonesia, Dan Dampaknya Terhadap Perekonomian," *KEAT:Kajian Ekonomi Dan Akuntansi Terapan* 1, no. 4 (2024): 279–93, <https://doi.org/10.61132/keat.v1i4.691>.

active regulatory engagement on forbearance classification where macro-driven distress, rather than borrower-specific imprudence, is the primary cause.<sup>47</sup>

The Quran's instruction in Surah Al-Baqarah (2:267) "Do not aim toward the defective thereof, spending from that while you would not take it yourself except with closed eyes" carries a direct normative implication for Islamic bank financing officers: financing must be extended with the same rigorous care a righteous believer would exercise in choosing what to give.<sup>48</sup> Reckless financing that generates NPF violates the foundational principle of amanah (trustworthiness), harming both depositors and the reputation of the Islamic financial system. Sharia Supervisory Boards should incorporate NPF thresholds and credit quality standards into annual Sharia compliance reviews, treating financing quality as a Sharia governance matter not merely a credit risk KPI.<sup>49</sup>

#### **The Effect of Firm Size on Profitability (ROA) of Cross-Country Islamic Banks (H4)**

Firm size does not exhibit a statistically significant effect on ROA ( $\beta = 0.0751$ ,  $p = 0.1207$ ), resulting in rejection of H4. This finding challenges the economies-of-scale hypothesis prevalent in early banking literature but is consistent with a growing body of cross-country evidence questioning the universality of the size-profitability relationship in Islamic banking Telly & Ansori (2017) dan Wardana & Lestari (2025). Two complementary mechanisms explain the non-significance. First, diseconomies of scale emerge beyond a certain asset threshold, as organisational complexity and coordination costs erode the efficiency benefits of scale. Second, and more fundamentally, the cross-country panel structure introduces country-level institutional heterogeneity regulatory quality, macroeconomic conditions, Sharia governance standards that dwarfs within-country asset size variation as a profitability determinant.<sup>50</sup>

Regional patterns illustrate why size is a poor universal proxy for competitive advantage. In the GCC, the largest banks in the sample Al Rajhi Bank (total assets exceeding USD 200 billion) and Abu Dhabi Islamic Bank operate in deep capital markets with sophisticated regulatory infrastructure that amplifies the benefits of scale. Yet even within this sub-group, profitability variation is better explained by

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<sup>47</sup> Rizki Dwi Hardiansyah, Moh Muksin, and Ahmad Fatoni, "Analisis Pengaruh Variabel Makro Dan Mikro Ekonomi Terhadap Non Performing Financing Pada Bank Umum Syariah Periode 2018-2023," *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah* 10, no. 3 (2025).

<sup>48</sup> Udin Komarudin et al., "Telaah Manajemen Sumber Daya Manusia Berbasis Al-Qur'an Surah Al-Baqarah Ayat 267 Dalam Penguatan Ekonomi Umat Berbasis Syariah," *Jurnal Hukum Ekonomi Syariah* 4, no. 1 (June 2, 2025): 54-61, <https://doi.org/10.37968/jhesy.v4i1.1267>.

<sup>49</sup> Sarah Zettira Agam Darwis, Ikhlasul Amal Amal, and Muryanni Aarsal, "Makna Amanah Dan Akuntabilitas Dalam Praktik Keuangan Bank Syariah," *SANTRI : Jurnal Ekonomi Dan Keuangan Islam* 4, no. 1 (February 4, 2026): 01-15, <https://doi.org/10.61132/santri.v4i1.2068>.

<sup>50</sup> Atif Yaseen and Agus Widarjono, "Does Bank Size Matter for Islamic Banks' Profitability? The Insight from Indonesia," *Proceeding of International Conference on Accounting & Finance* 2 (2024): 197-204, [www.ojk.go.id](http://www.ojk.go.id).

CAR and NPF than by asset size.<sup>51</sup> In Southeast Asia, mid-sized institutions such as Bank Muamalat Indonesia and Hong Leong Islamic Bank achieve competitive ROA figures not through scale but through specialised expertise in Sharia-compliant retail products and established depositor trust advantages that do not scale linearly with asset growth.<sup>52</sup> In South Asia and Turkey, Amana Bank Sri Lanka and Al Baraka Türk demonstrate that operating in volatile macroeconomic environments neutralises scale advantages entirely: institutional resilience, capital buffers, and asset quality discipline are the decisive determinants of profitability, not total assets.<sup>53</sup> This finding carries a direct strategic implication: the merger and acquisition consolidation wave currently reshaping Islamic banking in Indonesia (Bank Syariah Indonesia) and Pakistan should be evaluated on the basis of cultural compatibility, Sharia governance continuity, and operational synergies not on asset size targets alone.

### **The Effect of Liquidity (FDR) on Profitability (ROA) of Cross-Country Islamic Banks (H5)**

The Financing-to-Deposit Ratio demonstrates a positive and statistically significant relationship with ROA ( $\beta = 0.1378$ ,  $p = 0.0000$ ), confirming H5. The Intermediation Hypothesis (Klein, 1971; Gurley & Shaw, 1960) underlies this result: banks that more intensively transform collected deposits into Sharia-compliant financing contracts mudharabah, musyarakah, murabahah, ijarah generate proportionally higher income from profit-sharing ratios, mark-up margins, and rental income streams.<sup>54</sup> Southeast Asian banks average FDR of 80–96%, reflecting aggressive intermediation in markets with high retail financing demand; Hong Leong Islamic Bank sustains high FDR while keeping NPF manageable by leveraging Malaysia's EPF-i Islamic pension window and developed sukuk market as stable funding sources. GCC profiles vary: Qatar Islamic Bank's concentration in large corporate financing partly funded by direct sukuk issuances produces lower FDR, while Dukhan Bank's growing retail franchise drives FDR upward. These findings are consistent with Wardana & Lestari (2025), Subekti & Wardana (2022) and Baihaqi & Asih (2025), who confirm FDR's positive role in Islamic bank profitability.

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<sup>51</sup> Amina Buallay, "Corporate Governance, Sharia'ah Governance and Performance," *International Journal of Islamic and Middle Eastern Finance and Management* 12, no. 2 (April 30, 2019): 216–35, <https://doi.org/10.1108/IMEFM-07-2017-0172>.

<sup>52</sup> Kurrotul Aini, "Keunggulan Kompetitif Bank Syariah: Analisis Strategi Berbasis Nilai Sosial Dan Ekonomi Islam," *Maliki Interdisciplinary Journal (MIJ) EISSN* 3, no. 2 (2025): 995–1004, <http://urj.uin-malang.ac.id/index.php/mij/index>.

<sup>53</sup> Nimsith Nimsith, Safnas Safnas, and Safna Sfna, "Study on Financial Performance Analysis of Islamic Banking in Srilanka (Special Reference to Amana Bank)," *South Eastern University of Sri Lanka*, no. 1 (2026).

<sup>54</sup> Adedeji Daniel Gbadebo, "Theories of Financial Intermediation: Evaluation and Empirical Relevance," *Journal of Law and Sustainable Development* 12, no. 9 (September 2, 2024): e3950, <https://doi.org/10.55908/sdgs.v12i9.3950>.

A critical caveat applies: the positive FDR-ROA relationship is non-linear, and FDR elevation beyond prudential thresholds creates liquidity risk that rapidly erodes profitability.<sup>55</sup> The IFSB 2012 Liquidity Management Standard and the Basel III LCR framework both constrain unchecked FDR escalation. Turkish Islamic banks face a particular distortion: Lira depreciation inflates the local-currency value of foreign-currency deposits, artificially compressing FDR ratios and creating misleading intermediation signals that must be corrected through stress-tested liquidity gap analysis.<sup>56</sup> From the Islamic perspective, the Quranic instruction in Surah Al-Hashr (59:7) “so that wealth may not make a circuit only among the wealthy” imposes a Sharia-grounded intermediation duty on Islamic banks: deposits entrusted by the Muslim community carry a moral obligation to be channelled into productive real-economy financing. An Islamic bank maintaining an unnecessarily low FDR commits the economic equivalent of ihtikar (hoarding), forfeiting both profitability and Sharia purpose simultaneously.<sup>57</sup>

### **The Simultaneous Effects of CIR, CAR, NPF, Firm Size, and FDR on Profitability (ROA) of Cross-Country Islamic Banks (H6)**

The F-test confirms the simultaneous significance of all five variables ( $F = 78.287$ ,  $p = 0.0000$ ), with an  $R^2$  of 67.44%, establishing H6. Together, the five variables form an integrated profitability architecture: CAR provides the capital foundation; NPF control maintains the income base; FDR drives intermediation income; CIR directs strategic investment; and firm size, while individually insignificant, conditions the operating environment within which the other variables interact.

Viewed through the lens of maqasid al-Shariah, these five determinants collectively operationalise the Islamic banking sector’s fulfilment of hifz al-mal across three levels of obligation. At the individual bank level, strong CAR and controlled NPF represent the preservation of depositors’ entrusted wealth a direct expression of amanah. At the operational level, purposeful CIR investment and active FDR intermediation embody the principle of infaq: deploying institutional resources productively rather than hoarding them or wasting them. At the systemic level, the finding that cross-country profitability is simultaneously determined by all five variables rather than any single factor reflects the Islamic economic concept of tawazun (balance): no single dimension of financial health is sufficient; sustainable performance requires the harmonious integration of capital strength, asset quality,

<sup>55</sup> Allen N Berger and Robert Deyoung, “Problem Loans and Cost Efficiency in Commercial Banks,” *Journal of BANKING & ELSEVIER FINANCE Journal of Banking & Finance* 21, no. 21 (1997): 849–70.

<sup>56</sup> musnawati Musnawati, Nurnasrina Nurnasrina, and Syahpawi Syahpawi, “Analisis Manajemen Likuiditas Dan Manajemen Gap Pada Perbankan Syariah Yang Terdaftar Di Bursa Efek Indonesia Periode 2019-2022 Musnawati Nurnasrina Syahpawi,” trans. Jurnal DAWI 2, no. 2 (2024).

<sup>57</sup> Dzakwan Ramadhan, “Distribusi Harta Dalam Pandangan Ekonomi Islam: Kajian Qs. Al-Hasyr Ayat 7,” *JAHE: Jurnal Ayat Dan Hadits Ekonomi* 4, no. 5 (2026), <https://jurnalhamfara.ac.id/index.php/JAHE>.



operational discipline, and intermediation intensity. The Prophet's hadith "Each of you is a shepherd, and every shepherd is accountable for his flock" (Bukhari and Muslim) provides the normative capstone: Islamic bank management is not merely accountable to shareholders for return on equity, but to depositors, regulators, and the Muslim community for the holistic stewardship of financial resources in accordance with the divine mandate of Islamic economics.<sup>58</sup>

## Conclusion

Based on the research findings, the cross-country profitability of Islamic banks, as measured by ROA, is significantly influenced by the Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), Cost-to-Income Ratio (CIR), and Financing-to-Deposit Ratio (FDR), while firm size has no significant effect. CAR is the most dominant variable in improving profitability because it strengthens capital stability and financing capacity. Conversely, the NPF has a negative impact on ROA due to the increased risk of non-performing loans. Meanwhile, the CIR and FDR have a positive impact on ROA, indicating that operational efficiency and the optimization of intermediary functions contribute to improved bank performance.

Collectively, all independent variables account for 67.44% of the variation in profitability, indicating that the performance of Islamic banks is determined by a combination of capital, asset quality, efficiency, and intermediation. From the perspective of *maqasid al-shariah*, these findings underscore the importance of the principles of *amanah*, *hifz al-mal*, and *tawazun* in ensuring the sustainability of Islamic banks' profitability.

The findings of this study have several important policy implications for international Islamic banking regulators. The IFSB needs to promote the harmonization of minimum CAR standards across jurisdictions to eliminate competitive disparities among OIC member states. Regulators also need to develop a non-performing loan (NPL) classification framework that is sensitive to macroeconomic shocks, so that banks in countries facing significant economic pressures are not penalized twice for conditions beyond their control. In addition, the evaluation of CIR should focus on the quality of expenditures distinguishing wasteful spending from strategic investments with social value in accordance with the principles of *maqasid al-Shariah*. Finally, policies for the consolidation of Islamic banking should not be solely oriented toward asset size targets, but rather toward the alignment of Shariah governance and tangible operational synergies. Overall, effective regulation must be based on the principle of *tawazun*—a balance between capital adequacy, asset quality, strategic efficiency, and productive intermediation.

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<sup>58</sup> Refa Gustia, Didi Ashari, and Titin Hartini, "Manajemen Keuangan Syariah Dalam Perspektif Maqasid Syariah," *JURBISMAN: Jurnal Bisnis Manajemen* 3, no. 2 (2025): 255–64.



## Bibliography

- Abdallah, Mariem Ben, and Slah Bahloul. "The Impact of the COVID-19 Pandemic on the Financial Performance and Stability of Islamic Banks." *Journal of Islamic Accounting and Business Research* 17, no. 1 (January 30, 2026): 202–17. <https://doi.org/10.1108/JIABR-05-2023-0147>.
- Adella, Nova, Rani Wulandari, Alfa Rizki Saputra, and Heni Noviarita. "Utang Luar Negeri: Menelisik Faktor Penyebab, Kondisi Di Indonesia, Dan Dampaknya Terhadap Perekonomian." *KEAT:Kajian Ekonomi Dan Akuntansi Terapan* 1, no. 4 (2024): 279–93. <https://doi.org/10.61132/keat.v1i4.691>.
- ADIB. *Racing to What's Next*, 2025.
- Afkar, Taudlikhul, Ulfa Puspa Wanti Widodo, Wisudanto, Lina Rifda Naufalin, and Ferry Hariawan. "Profit Sharing System in Islamic Banking Before, During, and After Covid-19 Pandemic, Any Moderation?" *Journal of Accounting and Strategic Finance* 8, no. 1 (June 30, 2025): 50–73. <https://doi.org/10.33005/jasf.v8i1.569>.
- Aini, Kuratul, Wildan Sirojuddin, Suharsono, and Ariq Nurjannah Irbah. "Keberadaan Prinsip (Maqashid Al-Syariah) Hifdzul Mal Dalam Kegiatan Investasi Konvensional Non Maisir." *INVESTAMA: Jurnal Ekonomi Dan Bisnis*, no. 2 (2023). <https://www.hsbc.co.id/1/jenis-jenis>.
- Aini, Kurrotul. "Keunggulan Kompetitif Bank Syariah: Analisis Strategi Berbasis Nilai Sosial Dan Ekonomi Islam." *Maliki Interdisciplinary Journal (MIJ)* EISSN 3, no. 2 (2025): 995–1004. <http://urj.uin-malang.ac.id/index.php/mij/index>.
- Alnajjar, A. Z. A., & Othman, A. H. A. (2021). The Impact of Capital Adequacy Ratio (CAR) on Islamic Banks' Performance in Selected MENA Countries. *EuroMid Journal of Business and Tech-Innovation (EJBTI)*, 4(2), 116–133. <https://doi.org/10.51325/ijbeg.v4i2.70>
- Antwi, F. (2019). Capital Adequacy, Cost Income Ratio and Performance of Banks in Ghana. *International Journal of Academic Research in Business and Social Sciences*, 9(10). <https://doi.org/10.6007/ijarbss/v9-i10/6471>
- Ardana, Yudhistira, Anggita Nur Khofifah, and Dewi Puji Lestari. "Dynamics of Islamic Banks in the Digital Transformation Era." *Jurnal Al-Mashrof: Islamic Banking and Finance* 4, no. 1 (2023). <http://ejournal.radenintan.ac.id/index.php/almashrof>.
- Astuti, Ike Dwi, and Nur Kabib. "Faktor-Faktor Yang Mempengaruhi Profitabilitas Bank Syariah Indonesia Dan Malaysia." *Jurnal Ilmiah Ekonomi Islam* 7, no. 2 (July 5, 2021). <https://doi.org/10.29040/jiei.v7i2.2534>.
- Awintasari, L., & Nurhidayati, M. (2021). Pengaruh Non Performing Financing, Capital Adequacy Ratio, Beban Operasional dan Net Imbalan terhadap Return on Assets (Studi Pada Bank Maybank Syariah Periode 2012–2019). *Niqosiya: Journal of Economics and Business Research*, 1(1).
- Aysan, Ahmet F, Mustafa Disli, Husyein Oztruk, and Ibrahim M Turhan. "Are Islamic Banks Subject to Depositor Discipline? Are Islamic Banks Subject to Depositor Discipline?," 2013. <http://ssrn.com/abstract=2370444>Electroniccopyavailableat:<http://ssrn.co>

- m/abstract=2370444D/2013/7012/42https://ssrn.com/abstract=2370444Electroniccopyavailableat:http://ssrn.com/abstract=2370444Electroniccopyavailableat:http://ssrn.com/abstract=2370444.
- Ayusaleha, Annisa, and Nisful Laila. "Diversifikasi, Bank Karakteristik, Dan Profitabilitas Bank Umum Syariah Di Indonesia." *Jurnal Ekonomi Syariah Teori Dan Terapan* 9, no. 3 (May 31, 2022): 299–309. <https://doi.org/10.20473/vol9iss20223pp299-309>.
- Azhari, Zenny Nurul Aini, and Rendra Erdkhadifa. "Factors Affecting Capital Buffer in Indonesia Islamic Banking by Panel Regression Approach." *Jurnal Maharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah* 10, no. 4 (2025). <https://doi.org/10.30651/jms.v10i4.27564>.
- Azmi, Fika, Nugroho Heri Pramono, and Mirasanti Wahyuni. "AnalisisTingkat Kesehatan Bank Syariah Menghadapi Pandemi COVID-19." *Jurnal Ilmiah Ekonomi Islam* 7, no. 3 (2021).
- Baihaqi, M., & Asih, V. S. (2025). Pengaruh Rasio Likuiditas dan Solvabilitas terhadap ROA pada Perbankan Syariah yang Terdaftar di ISSI. *Jurnal Maps (Manajemen Perbankan Syariah)*, 8(2), 136–143. <https://doi.org/10.32627>
- Baltagi, Badi H. *Econometric Analysis of Panel Data*, 2005.
- Beck, Thorsten, Asli Demirgüç-Kunt, and Ouarda Merrouche. "Islamic vs. Conventional Banking: Business Model, Efficiency and Stability." *Journal of Banking & Finance* 37, no. 2 (February 2013): 433–47. <https://doi.org/10.1016/j.jbankfin.2012.09.016>.
- Berger, Allen N, and Robert Deyoung. "Problem Loans and Cost Efficiency in Commercial Banks." *Journalof BANKING & ELSEVIER FINANCE Journal of Banking & Finance* 21, no. 21 (1997): 849–70.
- Buallay, Amina. "Corporate Governance, Sharia'ah Governance and Performance." *International Journal of Islamic and Middle Eastern Finance and Management* 12, no. 2 (April 30, 2019): 216–35. <https://doi.org/10.1108/IMEFM-07-2017-0172>.
- Chotijah, S., & Fuadati, S. R. (2018). Pengaruh Kualitas Aset, Struktur Modal, Likuiditas, Permodalan, Ukuran Perusahaan terhadap Profitabilitas. [www.beritasatu.com](http://www.beritasatu.com)
- Darwis, Sarah Zettira Agam, Ikhlasul Amal Amal, and Muryanni Arsal. "Makna Amanah Dan Akuntabilitas Dalam Praktik Keuangan Bank Syariah." *SANTRI: Jurnal Ekonomi Dan Keuangan Islam* 4, no. 1 (February 4, 2026): 01–15. <https://doi.org/10.61132/santri.v4i1.2068>.
- Dsouza, S., Rabbani, M. R., Hawaldar, I. T., & Jain, A. K. (2022). Impact of Bank Efficiency on the Profitability of the Banks in India: An Empirical Analysis Using Panel Data Approach. *International Journal of Financial Studies*, 10(4). <https://doi.org/10.3390/ijfs10040093>
- Fauziah, Alifah, Mustopa Kamal, and Hasan Bisri. "Tafsir Teks Al-Qur'an Tentang Konsep 'Infak Dan Sadaqah' Dalam Sistem Ekonomi Syari'ah." *Iqtishaduna: Jurnal Ilmiah Mahasiswa Hukum Ekonomi Syariah* 8, no. 2 (March 2026): 106–28. <https://doi.org/10.23917/jisel.v8i01.7371>.

- Gbadebo, Adedeji Daniel. "Theories of Financial Intermediation: Evaluation and Empirical Relevance." *Journal of Law and Sustainable Development* 12, no. 9 (September 2, 2024): e3950. <https://doi.org/10.55908/sdgs.v12i9.3950>.
- Ghofir<sup>1</sup>, Ade, Viniyati Maftuchach<sup>2</sup>, Universitas Teknologi, Muhammadiyah Jakarta, Jalan Minangkabau, No 60, Jakarta Selatan, and Ade Ghofir. "Financial and Marketing Determinants of Banking Performance in Indonesia: A Systematic Literature Review. Ade Ghofir et.al Financial and Marketing Determinants of Banking Performance in Indonesia: A Systematic Literature Review." *Jurnal Multidisiplin Sahombu* 6, no. 02 (2026): 442–53.
- Ghouse, Ghulam, Nafees Ejaz, M. Ishaq Bhatti, and Aribah Aslam. "Performance of Islamic vs Conventional Banks in OIC Countries: Resilience and Recovery during Covid-19." *Borsa Istanbul Review* 22 (December 2022): S60–78. <https://doi.org/10.1016/j.bir.2022.11.020>.
- Ghozali, Imam. *Analisis Multivariat Dan Ekonometrika*, 2017.
- Gujarati, Damodar N. *Basic Econometrics*, 2009.
- Gustia, Refa, Didi Ashari, and Titin Hartini. "Manajemen Keuangan Syariah Dalam Perspektif Maqasid Syariah." *JURBISMAN: Jurnal Bisnis Manajemen* 3, no. 2 (2025): 255–64.
- Hafiz, Ahsan Putra, M Maulana Hamzah, and Seri Jana Juanda Safitri. "Pengaruh Rasio CAR, FDR, BOPO Dan NPF Terhadap ROA Bank Umum Syariah Di Indonesia Periode 2021-2023." *Margin: Journal Of Islamic Banking* 5, no. 1 (2025).
- Hardiansyah, Rizki Dwi, Moh Muksin, and Ahmad Fatoni. "Analisis Pengaruh Variabel Makro Dan Mikro Ekonomi Terhadap Non Performing Financing Pada Bank Umum Syariah Periode 2018-2023." *Jurnal Masharif Al-Syariah: Jurnal Ekonomi Dan Perbankan Syariah* 10, no. 3 (2025).
- Herdani, Wafa Syakila, Kanaisa Salsabila, Anisa Zahrotul Mupida, Joni Ahmad Mughni, and Raihana Fauziah. "Analisis Manajemen Permodalan Bank Syariah Melalui Pendekatan Adequacy Ratio (CAR), Aset Tertimbang Menurut Risiko(ATMR), Dan Kualitas Aktiva Produktif (KAP)." *Jurnal Ekonomi Manajemen Dan Bisnis* 3, no. 4 (2026).
- Hikmah, Nurul, and Nur Hishaly. "Strategi Adaptif Perbankan Syariah Menghadapi Ketidakstabilan Ekonomi Global Pasca Krisis." *Jurnal Inovasi Penelitian, Karya Ilmiah Dan Pengembangan* 3 (2025).
- Humairah, N., Andriansyah, Y., & Badjie, F. (2023). Determinants of Profitability in Indonesian Islamic Banks: Insights on Financial Performance. *Unisia*, 41(2), 413–440. <https://doi.org/10.20885/unisia.vol41.iss2.art9>
- IFSI. "Islamic Financial Services Industry Stability Report 2025," 2025. [www.ifsb.org](http://www.ifsb.org).
- Komarudin, Udin, Mery Maulin, Ah. Fathonih, and Dea Dea. "Telaah Manajemen Sumber Daya Manusia Berbasis Al-Qur'an Surah Al-Baqarah Ayat 267 Dalam Penguatan Ekonomi Umat Berbasis Syariah." *Jurnal Hukum Ekonomi Syariah* 4, no. 1 (June 2, 2025): 54–61. <https://doi.org/10.37968/jhesy.v4i1.1267>.

- Kumalasari, I. A., & Hersugondo. (2020). Analisis Pengaruh LOANTA, LTA, AU, IER, EQTA, EQL dan CIR terhadap Profitabilitas pada Bank Umum Syariah di Indonesia (Studi Kasus pada Bank Umum Syariah Yang Terdaftar di Otoritas Jasa Keuangan Tahun 2008-2018). *DIPONEGORO JOURNAL OF MANAGEMENT*, 9(4). <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Kurniawati, Lina, Guntur Kusuma Wardana, and Muhammad Riza Hafizi. "The Effect of Liquidity, Leverage, Capital, Efficiency, and Asset Quality on Islamic Bank Profitability in Asia." *FINANSIA : Jurnal Akuntansi Dan Perbankan Syariah* 8, no. 2 (November 24, 2025): 125–40. <https://doi.org/10.32332/finansia.v8i2.10454>.
- Kusumaningrum, T. A., & Maika, & M. R. (2024). Pengaruh BOPO dan FDR terhadap Profitabilitas Return on Asset (ROA) Bank Bukopin Syariah. *Jurnal Tabarru' : Islamic Banking and Finance*, 7(1).
- Maknuun, L. Il, Asiyah, U., Aftian, R. Y., & Febrianti, A. (2024). Pengaruh Capital Adequacy Ratio (CAR), Financing To Deposit Ratio (FDR), Non Performing Financing (NPF), terhadap Profitabilitas dengan Good Corporate Governance (GCG) Sebagai Variabel Intervening (Studi Kasus Pada Bank Umum Syariah 2015-2019). *Jurnal Dinamika Ekonomi Syariah*, 11(1).
- Maruly, Salsa Dela. "Risk Management in Sharia Financing: Credit Risk Analysis in Murabahah Financing in Islamic Banking in Surabaya." *Jurnal Ilmiah Manajemen Kesatuan* 11, no. 3 (2023): 1161–68.
- Moustapha, L., & Benziane, R. (2022). The Impact of Capital Structure on Islamic Banks Profitability: Evidence from GCC Countaries. *Indian Journal of Finance and Banking*, 9, 203–212. <https://doi.org/10.46281/ijfb.v9i1.1669>
- Musnawati, musnawati, Nurnasrina Nurnasrina, and Syahpawi Syahpawi. "Analisis Manajemen Likuiditas Dan Manajemen Gap Pada Perbankan Syariah Yang Terdaftar Di Bursa Efek Indonesia Periode 2019-2022 Musnawati Nurnasrina Syahpawi." Translated by *Jurnal DAWI* 2, no. 2 (2024).
- Nafiah, S., Balafif, M., & Khoir, F. (2024). Pengaruh Pembiayaan Mudharabah, Musyarakah dan Financing to Deposit Ratio (FDR) Terhadap Profitabilitas Pada PT. Bank Pembiayaan Rakyat Syariah Karya Mugi Sentosa Surabaya. *Bharanomics*, 4(2), 65–74. <https://doi.org/10.46821/bharanomics.v4i2.588>
- Nimsith, Nimsith, Safnas Safnas, and Safna Sfna. "Study on Financial Performance Analysis of Islamic Banking in Srilanka (Special Reference to Amana Bank)." *South Eastern University of Sri Lanka*, no. 1 (2026).
- Nusantari, Farida Ayu Avisena. "Analisis Perkembangan Dan Prospek Lembaga Microfinance Syariah Di Periode 2025-2030." *JLBM: Jurnal Lentera Manajemen Keuangan*, no. 2 (2024).
- Prihatin, K. S. (2024). Pengaruh NPF dan BOPO terhadap Profitabilitas pada Bank BJB Syariah Periode 2014-2021. *Jurnal Pendidikan, Auntansi Dan Keuangan*, 7(1). [www.bjbsyariah.co.id](http://www.bjbsyariah.co.id).
- QIB. *Results Presentation Jun 2025*, 2025.
- Raedi, Raedi, Husaini Husaini, Ghazali Syamni, and Nurhasanah Nurhasanah. "Pengaruh Faktor Internal Dan Terhadap Profitabilitas Umum Syariah Di

- Indonesia 2015-2020." *Jurnal Visioner & Strategis* 12, no. 2 (2023).
- Rahmadani, Y., & Wijayanti, I. M. (2024). Pengaruh CSR, Ukuran Perusahaan, dan FDR terhadap Profitabilitas Bank Syariah Sinarmas. *Jurnal Riset Perbankan Syariah*, 3(2), 83-88. <https://doi.org/10.29313/jrps.v3i2.5047>
- Ramadhan, Dzakwan. "Distribusi Harta Dalam Pandangan Ekonomi Islam: Kajian Qs. Al-Hasyr Ayat 7." *JAHE: Jurnal Ayat Dan Hadits Ekonomi* 4, no. 5 (2026). <https://jurnalhamfara.ac.id/index.php/JAHE>.
- Rofi'uddin, M. (2025). Pengaruh Cost To Income Ratio, Capital Adeqacy Ratio, dan Non-Performing Financing terhadap Profitabilitas Perbankan Syariah di Indonesia dengan Financing To Deposit Ratio Sebagai Variabel Intervening. Universitas Islam Negeri Salatiga.
- Rosiyanti, M., Oktaviani, Y., & Novida, I. (2024). Pengaruh NPF, FDR, dan BOPO terhadap Profitabilitas PT Bank Syariah Indonesia Tbk KCP Tangerang Cimone. *Jurnal Fidusia*, 7(1).
- Sapitri, N. A., & Irawan, B. K. (2023). Impact of the Capital Adequacy Ratio (CAR) and Mudharabah on the Return on Asset (ROA) on Sharia General Banks Registered in the Financial Services Authority (OJK). *Journal of Waqf and Islamic Economic Philanthropy*, 1(1), 1-12. <https://economics.pubmedia.id/index.php/wiep>
- Saputro, Muhammad Bagus, and Satriyawan Wahyudi. "Kebijakan Anti-Riba Di Turki: Tinjauan Konsep Al-Hisbah Dalam Kebijakan Ekonomi Recep Tayyip Erd." *Journal of Society and Scientific Studies* 1, no. 2 (2025): 9-18. <https://journal.scientiva.org/scientiva/index>.
- Subekti, W. A. P., & Wardana, G. K. (2022). Pengaruh CAR, Aset Growth, BOPO, DPK, pembiayaan, NPF, dan FDR terhadap ROA Bank Umum Syariah. *Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 5(2). <https://www.bps.go.id/publication/2020/12/21/7ec02d39d6732972dcebe54f/analisis-hasil->
- Sugiyono, Sugiyono. *Metode Penelitian Kuantitatif Kualitatif Dan R&D*, 2020.
- Syamsi, D. A., & Bawono, A. (2024). Analysis of Factors Influencing The Profitability of Islamic Banking. *Journal of Applied Economics in Developing Countries*, 9(1), 33-41. <https://doi.org/10.20961/jaedc.v9i1.81527>
- Syifa, Siti Muallifatus. "Pengaruh Non Performing Financing, Pendapatan Operasional Dan Beban Operasional Terhadap Profitabilitas Pada Bank Umum Syariah Di Indonesia Periode 2015-2021." *JURNAL MUAMALAT INDONESIA - JMI* 2, no. 2 (October 31, 2022). <https://doi.org/10.26418/jmi.v2i2.58176>.
- TAB. "Strongest Islamic Banks ," 2025.
- Telly, B. R., & Ansori, M. (2017). Pengaruh Ukuran dan Cash Conversion Cycle terhadap Profitabilitas Perusahaan. *JOURNAL OF APPLIED MANAGERIAL ACCOUNTING*, 1(2), 179-189.
- Touti, Nihal, and Asmâa Alaoui Taïb. "Research Status and Prospects of Shariah Compliance Impact on Firm Risk, Performance and Resilience." *Journal of Islamic Monetary Economics and Finance* 10, no. 4 (2024): 679-708.



<https://doi.org/10.21098/jimf.v10i4.2152>.

Turkey, Republic of. "Republic Of Türkiye 4 International Monetary Fund," 2023.

Umar, Ahmad Ulil Albab Al, and Slamet Haryono Haryono. "Kinerja Keuangan Bank Syariah: Perbandingan Studi Dari Indonesia, Malaysia, Arab Saudi Dan United Emirates Arab." *Owner* 6, no. 2 (April 3, 2022): 1830–40. <https://doi.org/10.33395/owner.v6i2.822>.

Wardana, G. K., & Abdani, F. (2023). Bukti Efisiensi Bank Syariah di Indonesia dan Malaysia: ROA, BANK SIZE dan NPF. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 17(1). <https://doi.org/10.32812/jibeka.v17i1.1026>

Wardana, Guntur Kusuma, and Renita Diyana Lestari. "The Profitability of Islamic Banking in the World: Liquidity, Company Size, and Capital Adequacy." *Indonesian Journal of Banking and Financial Technology* 3, no. 3 (July 30, 2025): 245–58. <https://doi.org/10.55927/fintech.v3i3.70>.

Wijaya, Meisha Fatma, Tesselonika Fedrova Br Simanjutak, Arnol Prabowo Siagian, Adyanto Armando Purba, Rista Y Lumbangaol, Tiara Posma Udur Hutapea, and Iman Ashari Siregar. "Analisis Pengaruh Faktor Internal Terhadap Profitabilitas Bank Syariah Indonesia (BSI) Periode 2013–2022." *Al Itmamiy Jurnal Hukum Ekonomi Syariah (Muamalah)* 5, no. 1 (May 20, 2023): 65–75. <https://doi.org/10.55606/ai.v5i1.316>.

Yaseen, Atif, and Agus Widarjono. "Does Bank Size Matter for Islamic Banks' Profitability? The Insight from Indonesia." *Proceeding of International Conference on Accounting & Finance* 2 (2024): 197–204. [www.ojk.go.id](http://www.ojk.go.id).

Yayan, K. A., & Putri, R. N. A. (2024). Pengaruh CAR, BOPO, NPF, dan FDR Terhadap Profitabilitas Bank Umum Syariah di Indonesia (Studi Kasus Tahun 2018–2022). *Sanjana (Jurnal Perbankan Syariah Dan Ekonomi Syariah)*, 6(01), 2024.

Yuni. (2024). *Pengaruh FDR, CIR, dan BOPO Terhadap ROA Pada Bank Muamalat Indonesia Tahun 2019–2023*. Institut Agama Islam Negeri Curup.