

## Analysis of Financial Performance and Macroeconomics On Profitability of Islamic Banking In Indonesia

Nadian Mustofa<sup>1</sup>, Agung Slamet Sukardi<sup>2</sup>

Institut Agama Islam Negeri Kudus<sup>12</sup>

[nadianmus@ms.iainkudus.ac.id](mailto:nadianmus@ms.iainkudus.ac.id)<sup>1</sup>, [agungslamet@iainkudus.ac.id](mailto:agungslamet@iainkudus.ac.id)<sup>2</sup>

---

### ARTICLE INFO

**Keywords:** Profitability, Islamic Bank, Financial Ratio, Macroeconomics

**Article history:**

Received: : 2024-12-13  
Revised 1 : 2025-01-21  
Revised 2 : 2025-01-27  
Accepted : 2025-01-30  
Available online : 2025-02-02

### ABSTRACT

*This study explores how financial parameters (CAR, NPF, OER, NOM, FDR) and macroeconomic variables (Inflation, BI Rate, GDP) affect Indonesian Islamic commercial banks' profitability (ROA). Previous research has found inconsistent effects of these factors. This research seeks to discover key elements affecting Islamic bank profitability. All elements boost Islamic commercial bank profitability.*

*Utilizing secondary data sourced from Islamic banks registered with the OJK and macroeconomic variables covering the period from Q1 2018 to Q2 2024, quantitative analysis with multiple regression is applied. Three Islamic institutions were chosen using purposive sampling, and the study was carried out using SPSS version 30.*

*According to the results, ROA is positively and significantly affected by NPF, OER, and CAR, but not by NOM, FDR, inflation, BI Rate, or GDP. These findings point to the fact that operational efficiency and finance risk management have a more substantial impact on the profitability of Islamic organizations.*

---

[This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.](#)

---

## Introduction

Indonesian Islamic banks' assets have increased significantly during the last year. From IDR541.072 trillion in June 2023 to IDR606.887 trillion in June 2024, Islamic commercial banks' total assets increased by 12.16 percent, as reported by the Financial Services Authority (OJK). Increased confidence in Islamic financial services and a larger portion of the market are indicators of this trend. Nonetheless, profitability metrics, specifically Return on Assets (ROA), for Islamic public banking stood at 2.06%, which is inferior to the 2.66% recorded by conventional public banking over the same timeframe. This discrepancy prompts enquiries regarding the efficacy of financial management within Islamic banking. One important indicator of a bank's health is its profitability. A company is considered profitable if it is able to turn a profit by making good use of all of its resources, including sales, cash, capital, labour, and the locations of its branches (Harahap, 2013). Return on Assets (ROA) is one metric that Bank Indonesia has identified as a way to gauge a bank's profitability. A high return on assets (ROA) indicates that a business is making good use of its assets, which is important for financial institutions (Endraswati, 2018) Profitable enterprises indicate that they have promising futures and will be able to sustain themselves over the long run (Almunawwaroh and Marlina, 2018).

**Table 1**

**ROA Data for Sharia Commercial Bank in Indonesia from 2018 to 2024**

Ratio	2018	2019	2020	2021	2022	2023	June 2024
ROA	1.28%	1.73%	1.40%	1.55%	2.00%	1.88%	2.06%

Source: OJK Website

According to Table 1, Islamic Commercial Banks' profitability has fluctuated during the last seven years. Islamic banking's return on assets (ROA) remained constant at 0.45% in 2018 and 2019. In 2020, during the Covid-19 epidemic, Islamic banking's Return on Assets (ROA) fell from 1.4% the previous year. In the second year of the Covid-19 epidemic, 2021 data indicated that the ROA of Islamic banking rose to 1.55%. Subsequently, the Return on Assets (ROA) exhibited an upward trend, with Islamic banking ROA recorded at 2.00% in 2022 and 1.88% in 2023. As of June 2024, it was 2.06%. Based on the numbers, Islamic banks still have a Return on Assets (ROA) position below 2%, which is not stable enough. A lot of research has been done on how NPF, CAR, FDR, OER and NOM affect Islamic banks' ability to make money. Hanafia and Karim's (2020) research shows that NPF and NOM have a good effect on ROA, while research Astuti (2022) show that in Islamic banks, OER has a good effect on ROA and CAR, FDR, and NPF have a negative effect on ROA. The research that Supardi and Syafri (2023) indicates that CAR and FDR influence ROA, whereas NPF and OER do not impact ROA. Numerous studies have yielded inconsistent findings regarding the impact of these financial performance metrics on profitability. There is a big effect of socioeconomic factors on how profitable Islamic banking is in Indonesia. Islamic banking must sustain strong financial performance to ensure profitability, which is indicative of public trust and the efficacy of bank management. Research conducted by Zuhroh (2022) Macroeconomic data study comprising the BI rate, inflation, and exchange rate shows that these factors have little bearing on Islamic banking's

Return on Assets (ROA) in Indonesia. Other studies recommended by Selayan (2023) shows that whilst inflation and currency rates have no appreciable effect, Gross Domestic Product (GDP) clearly and significantly affects Return on Assets (ROA). However, studies that fully incorporate macroeconomic factors are few, including inflation, the BI Rate, and GDP, which significantly influence the performance of Islamic banking. Furthermore, numerous studies are constrained to a particular timeframe or examine only a limited subset of variables. The study of Islamic banking profitability in Indonesia is important as the sector plays a major role in promoting financial inclusion, supporting MSMEs, and strengthening the real sector as the foundation of the national economy. Sharia principles based on justice and sustainability enable Islamic banks to reach out to communities underserved by conventional banking, thereby promoting equitable economic growth. Islamic banking profitability also reflects financial stability, public confidence, and competitiveness amid global competition. By understanding internal factors, such as operational efficiency, and external factors, such as macroeconomic conditions, the sector can continue to grow, attract investment, and contribute more to national economic development.

This study aims to analyse how internal and external factors, specifically Non-Performing Financing (NPF), Operational Efficiency Ratio (OER), Capital Adequacy Ratio (CAR), Net Operating Margin (NOM), Financing To Deposit Ratio (FDR) as well as external variables such as inflation, BI Rate, and Gross Domestic Product (GDP), affect the profitability of Islamic banking in Indonesia as measured by Return on Asset (ROA). This study was conducted to fill the gap of previous literature that has not thoroughly integrated internal and external factors in the context of Islamic banking. The results show that OER, NPF and CAR have a positive and significant influence on profitability, while external factors such as inflation, BI Rate, and GDP do not have a significant impact. These findings provide empirical evidence that good internal management is the main key in increasing Islamic banking profitability. Thus, this study not only helps Islamic banks to formulate strategies for sustainable financial performance improvement but also provides insights for regulators in setting policies that support the stability and expansion of the Islamic banking sector in Indonesia.

## **Literature Review**

### **Islamic Banking**

Everything that is connected to Islamic banking and Islamic business enterprises is included in Islamic banking. This includes the institutions, the commercial activities, and the techniques employed to carry out these operations. Islamic banks serve the function of mobilizing funds from the public through deposits and investments from capital providers. Another purpose is to allocate monies to other entities requiring financial resources through transactions or business collaborations (Irsyad et al., 2024).

### **Agency Theory**

The fundamental tenet of agency theory posits a functional relationship between the party granting authority to the investor and the party receiving that authority, specifically the manager (Syakhrun et al., 2019). The global monetary system is profoundly affected by the fast growth of Islamic commercial banks. Customers' interest in Islamic bank funds and the

return on equity are influenced by how well Islamic banks do financially. A potential conflict of interest may arise between Islamic financial institutions (the agents) and their customers (the principals) in this case. The primary principle of agency theory, which establishes roles for both bank management and investors, forms the basis of this study's theoretical framework. As a result, when assessing a company's prospects, investors and customers look for data related to strong financial success.

### ROA

Return on assets (ROA), calculated as net profit divided by total assets, is a popular metric for assessing a company's financial health. This is where the bank's profitability as a percentage of total assets comes into play. A higher ROA indicates more profitability for a bank. This differs from Return on Equity (ROE), which solely emphasises the return level on equity for the company's owners, hence influencing investors' interest in investment opportunities (Dwinanda & Tohirin, 2021). Return on Assets (ROA) is determined by comparing pre-tax earnings to total assets using the following formula:

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

### CAR

A bank's capital adequacy ratio is a measure of its proportion of risky assets. (including credit, investments, securities, and interbank bills) that are financed by its own capital, as opposed to external funding sources such as public deposits and loans (Dendawijaya, 2009). Maintaining CAR ensures client safety and supports the bank's financial stability (Faizal Fachri & Mahfudz, 2021). A greater CAR value indicates an enhanced capacity for the bank to withstand potential losses. The CAR can be computed via the subsequent formula:

$$CAR = \frac{\text{Bank Capital}}{\text{Average Total Assets} \times \text{Weighted assets by risk}} \times 100\%$$

### NPF

With the exception that NPF is used by Islamic financial institutions, Non-Performing Financing is essentially the same as Non-Performing Loans in conventional banks. Islamic banks do not acknowledge loans; they utilise financing instead (Faizal Fachri & Mahfudz, 2021). An increase in the NPF will diminish the bank's profitability, as uncollectable funds hinder the bank's capacity to finance other productive assets. This leads to diminished bank revenue, hence disrupting banking profitability (Almunawwaroh and Marlina, 2018). NPF can be computed using the subsequent formula:  $NPF = \frac{\text{Non-Performing Financing}}{\text{Total Financing}} \times 100\%$

### OER

When operating expenses are divided by operating revenue, the resulting ratio is the operational efficiency ratio. The bank is effectively managing its resources when the OER ratio is low. Bank Indonesia has specified that an OER ratio of 93.52% is considered acceptable for Indonesian banks (Syakhrun et al., 2019). The operational expense ratio measures the efficiency of management spending as a percentage of operating income, regarded as a critical factor in banking profitability, as banks can enhance profitability through effective cost management and operational efficiency (Aprillia et al., 2023). OER can be computed using the subsequent formula:  $OER = \frac{\text{Operating Expenses}}{\text{Operating Income}} \times 100\%$

### NOM

Banks are ranked by their net operating margin, which indicates how efficiently their management translates their producing assets into net profits. Gains in profit sharing from productive assets are positively correlated with NOM, which mitigates the impact of potential banking issues (Aulia & Anwar, 2021). A high NOM indicates that the bank can operate its business efficiently, as seen by its assets generating profits. Consequently, this suggests that the bank is becoming more and more reliant on productive assets in order to produce revenues, hence reducing the company's liquidation risk. The following method can be used to figure out NOM: 
$$\text{NOM} = \frac{\text{Net Operating Income}}{\text{Average Earning Assets}} \times 100\%$$

### **FDR**

The ratio of a bank's financing to its deposits is one indicator of its liquidity. This tells you how well the bank can meet financing requests relative to its total assets (Moorcy et al., 2020). FDR serves as a metric indicating the extent of development finance provided by the bank (Darsita, 2020). The FDR shows how much of the bank's total funding came from deposits compared to how much financing the bank delivered. A greater ratio signifies a diminished liquidity capacity of the respective bank. The diminished liquidity can affect the enhancement of profitability (Almunawwaroh and Marlina, 2018). The following method can be used to figure out FDR: 
$$\text{FDR} = \frac{\text{Total Financing}}{\text{Total Deposits}} \times 100\%$$

### **Inflation**

When prices across the board rise for a set amount of time, we say that there has been inflation (Nurjanah & Hendratno, 2018). Elevated inflation rates will lead to an increase in consumption, subsequently impacting savings and finance behaviours within the society. Islamic banks' day-to-day operations will be affected by the changes. Islamic banks' bottom lines will take a hit because of a decline in community fund aggregation. The economic well-being of the community is negatively impacted by inflation (Prasaja, 2020). Consequently, as inflation arises, interest rates will escalate, leading individuals to hesitate in borrowing from financial institutions. Inflation can be calculated using the formula: 
$$\text{Inflation Rate} = \frac{\text{CPI}_{\text{current}} - \text{CPI}_{\text{previous}}}{\text{CPI}_{\text{previous}}} \times 100\%$$

### **BI Rate**

The Bank Indonesia Rate (BI rate) functions as the benchmark interest rate for loans provided by conventional banks. Islamic banking eschews the use of interest in its operations, both for fundraising and financing purposes. In a mixed economy, Islamic bank customers, particularly institutional or large depositors, will continue to consider interest rates and compare them with those of conventional banks. In the absence of a substitution between conventional and Islamic banks, the BI rate does not play a crucial role in setting deposit rates, as the relationship between the bank and the depositor is founded on profit and loss sharing principles. The BI rate is correlated with Islamic banks' performance because, to stay competitive, Islamic banks must adjust their returns to match the increasing deposit interest rates offered by conventional banks, even if this means Islamic banks' returns are lower. Reducing profitability and increasing inefficiency, the policy of changing the profit-sharing ratio of third-party funds (Zuhroh, 2022).

### **GDP**

The Gross Domestic Product is one macroeconomic statistic that influences the profitability of Islamic banks. GDP is a metric for assessing the aggregate income of an economy and its total expenditure on goods and services. Gross Domestic Product (GDP) quantifies the aggregate income and spending within an economy. Consequently, GDP serves as an indicator of the welfare of the average self-sufficient individual. An increase in Gross Domestic Product will result in a corresponding rise in individual incomes, hence enhancing the capacity to save. With more people putting money away, Islamic banks will be able to make more money (Selayan et al., 2023). GDP may be calculated using the formula below:

$$\text{GDP} = \text{Investment} + \text{Government spending} + \text{Consumption}(\text{Exports} - \text{Imports})$$

## Research Methods

The methodology of this investigation is quantitative, a way for evaluating specific hypotheses by analysing the relationships between variables (Noor, 2012). This research method was chosen because it could provide objective, measurable, and reliable results to describe the phenomenon of profitability in the Islamic banking sector. In addition, this approach is in accordance with the use of quantitative secondary data. The research population is all Islamic commercial banks in Indonesia listed on the Bank Indonesia website and included in OJK statistical data. This research uses purposive sampling method, which is a deliberate sample selection based on certain criteria to ensure the relevance and representativeness of the research subject. The criteria include Islamic banks that are registered with Bank Indonesia and OJK, have complete financial data during 2018-2024, and can represent the condition of the Islamic banking industry in Indonesia. The research sample consists of Bank Syariah Indonesia (BSI), Bank BCA Syariah, and Bank Victoria Syariah, which are considered to represent the performance characteristics of Islamic banking. This approach ensures that the data analysed is relevant, so that the research results accurately describe the dynamics of profitability.

There is a total of 78 data points in the collection, which covers research samples obtained from 2018 Q1 to 2024 Q2. Information drawn from the Directorate of Islamic Banking Statistics and made public by Bank Indonesia, need to mention the website of the Financial Services Authority ([www.ojk.co.id](http://www.ojk.co.id)). This study uses multiple linear analysis in SPSS version 30 to examine the link between ROA and CAR, NPF, OER, NOM, FDR, Inflation, BI Rate, and GDP.

## Results and Discussion

### Descriptive Statistic Analysis

The goal of this analytical description is to find out how the variable data that was studied is spread out. This section presents the descriptive statistics for each variable in the study.

Table 2

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	78	15.59	149.68	33.1286	23.32549
NPF	78	.00	4.08	1.1891	1.29631

OER	78	68.94	99.80	85.9447	8.28388
NOM	78	.01	2.84	1.3632	.73037
FDR	78	50.12	107.85	81.1895	9.40471
INF	78	1.33	5.95	2.9223	1.19499
BI RATE	78	3.50	6.25	4.8558	1.01891
GDP	78	-5.32	7.08	3.8192	3.04300
ROA	78	.02	2.51	1.1421	.64729
Valid N (listwise)	78				

The mean return on assets (ROA) in the dataset comprising 78 items is 1.1421, accompanied by a standard deviation of 0.64729, as presented in the table. The mean for CAR is 33.1286 and the standard deviation is 23.32549. The mean for NPF is 1.1891 and the standard deviation is 1.29631. The mean for OER is 85.9447, and the standard deviation is 8.28388. The mean for NOM is 1.3632 and the standard deviation is 0.73037. There has been a Federal Reserve The average value of GDP is 3.8192, the average value of inflation is 2.922, the average BI Rate is 1.19499, whereas the standard deviation for GDP is 9.40471.

**Classic Assumption Test**

**Normality Test**

**Table 3**  
**Normality Test**

		Unstandardized Residual	
N		78	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.11737537	
Most Extreme Differences	Absolute	.086	
	Positive	.086	
	Negative	-.081	
Test Statistic		.086	
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	
Monte Carlo Sig. (2-tailed) <sup>e</sup>	Sig.	.164	
	99% Confidence Interval	Lower Bound	.154
		Upper Bound	.173

The Kolmogorov-Smirnov test is used to check for normality. Because 0.05 is a significant value, we can conclude that the data has a normal distribution with an Asymp. Sig. (2-tailed) value is 0.200.

**Multicollinearity Test**

**Table 4**  
**Multicollinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
CAR	.816	1.226
NPF	.338	2.959
OER	.225	4.448
NOM	.270	3.706
FDR	.468	2.138
INF	.693	1.443
BI RATE	.559	1.789
GDP	.709	1.410

Dependent Variable: ROA

The multicollinearity test determines whether a regression model can identify relationships among independent variables. In an ideal regression model, the independent variables should not be related in any way. A VIF (Variance Inflation Factor) value below 10 indicates the lack of multicollinearity, as per the VIF criterion. The multicollinearity test results table that was previously presented indicates that each independent variable has a Tolerance Value greater than 0.100 and a VIF less than 10.00. This demonstrates both the absence of multicollinearity symptoms and the multicollinearity assumption.

**Autocorrelation Test**

**Table 5**  
**Autocorrelation Test**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.872 <sup>a</sup>	.760	.731	.33773	1.949

The objective of autocorrelation testing is to verify the existence of sequential correlation between two or more linked variables. The Durbin-Watson (DW) methodology is employed in this study as the statistical technique for testing. A potential method for verifying autocorrelation is to compare the DW statistic with the dU and dL values from the Durbin-Watson table. The Durbin-Watson value of 1.949 was obtained from the autocorrelation test, as illustrated in the table above. The dL value is 1.4148 and the dU value is 1.8634 at a five percent significance level for  $\alpha$ , as indicated by the Durbin-Watson table. This is based on a sample size of 78 and  $k = 8$ . The DW value (1.949) is within the range of dU (1.8634) and 4-dU (2.1366), suggesting that there is no autocorrelation.



**Heteroscedasticity Test**

**Table 6**  
**Heteroscedasticity Test**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.066	.084		.783	.436
CAR	-5.161E-5	.000	-.044	-.339	.736
NPF	-.005	.004	-.238	-1.174	.245
OER	4.872E-5	.001	.015	.060	.953
NOM	-.004	.008	-.112	-.495	.622
FDR	-.001	.000	-.176	-1.025	.309
INF	-.002	.003	-.106	-.747	.458
BI RATE	.005	.004	.190	1.209	.231
GDP	-.001	.001	-.117	-.838	.405

Dependent Variable: ROA

This test determines if regression model observations differ in variance. The Glejser test regresses absolute residuals against the independent variable to test heteroscedasticity. Heteroscedasticity symptoms are detected at a 5% significance level ( $\alpha$ ). A significance greater than alpha ( $\alpha$ ) suggests no heteroscedasticity symptoms. There is no evidence of heteroscedasticity in the table, since all of the independent variables have significance levels greater than 0.05.

**Simultaneous Test (F Test)**

**Table 7**  
**Simultaneous Test**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	31.201	8	3.900	253.680	<.001 <sup>b</sup>
Residual	1.061	69	.015		
Total	32.262	77			

Dependent Variable: ROA

The table displays a significance value of 0.001 (below 0.05), indicating that the dependent variable is substantially influenced by the variable GDP, FDR, CAR, NOM, INF, BI RATE, NPF, and OER in combination.

**Test Coefficient of Determination (R<sup>2</sup> Test)**

**Table 8**  
**Test Coefficient of Determination**

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.983 <sup>a</sup>	.967	.963	.12399

a. Predictors: (Constant), GDP, FDR, CAR, NOM, INF, BI RATE, NPF, OER

With this coefficient of determination test, we want to know how much the independent variable explains the dependent variable's variability. According to the Adjusted R Square value of 0.963, 96.3% of the variance in the profitability variable (ROA) is explained by the following variables: GDP, FDR, CAR, NOM, INF, BI RATE, NPF, and OER. The remaining 3.7% is explained by components that are not included in this study.

**Multiple Linear Regression Analysis**

**Partial Test Results (t Test)**

**Table 9**  
**Partial Test Results**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.737	.369		20.976	<,001
	CAR	-.005	.001	-.163	-6.725	<,001
	NPF	-.038	.019	-.076	-2.015	.048
	OER	-.072	.004	-.927	-20.128	<,001
	NOM	.015	.037	.017	.407	.685
	FDR	-.003	.002	-.048	-1.511	.135
	INF	-.001	.014	-.001	-.045	.965
	BI RATE	.018	.019	.029	.979	.331
	GDP	-.004	.006	-.019	-.721	.473

Dependent Variable: ROA

The regression analysis produced the following equation, which is shown in table 9:

$$ROA = 7.737 - 0.005 \text{ CAR} - 0.038 \text{ NPF} - 0.072 \text{ OER} + 0.015 \text{ NOM} - 0.003 \text{ FDR} - 0.001 \text{ INF} + 0.018 \text{ BI RATE} - 0.004 \text{ GDP} + e$$

**Discussion**

By examining the impact of each independent variable on the dependent variable, this study uses the t-test to determine if the hypothesis is accepted. Based on the data in table 9, may draw the following analytical results:

**The Effect of CAR on ROA**

Both the t-value (-6.725) and the probability (0.001) obtained from panel data regression analysis were below than the significance level (0.05). Therefore, the profitability of Islamic banks is impacted by CAR. A bank's ability to avoid financial and investment losses is

gauged by the Capital Adequacy Ratio (CAR). With a greater CAR, the bank is better able to weather potential losses and keep operations steady. An CAR enhances profitability via improved risk management and mitigates conflicts between owners and management. Sufficient capital affords management the opportunity to make decisions that benefit the bank collectively, so aligning the objectives of the principle and agent. Numerous empirical studies corroborate this conclusion, specifically study by Yuliana and Listari (2021), research shows that CAR boosts Indonesian Islamic banking profitability. Study by Supardi and Syafri (2023) proven that CAR boosts Indonesian Islamic Bank profitability from 2018-2022. Islamic banks need to manage capital well to maintain competitiveness, financial stability, and the sustainability of the Islamic financial sector operations in Indonesia.

#### **The Effect of NPF on ROA**

Panel data regression analysis yielded a probability value of 0.048 and a t-value of -2.015, below 0.05. NPF affects Islamic banking profitability. Rare research shows that NPF boosts Indonesian Islamic bank profits. However, most research demonstrate that NPF hurts profitability. For instance, study by (Almunawwaroh and Marlina, 2018) found that NPF significantly reduces Indonesian Islamic bank profitability. NPF can boost profitability under specific conditions. Islamic banks may be able to turn problematic loans into income-generating assets with appropriate risk management and financing restructuring procedures. Additionally, fines or late fees on faulty funding might boost profits. An empirical study showing the positive impact of NPF was conducted by Hanafia & Karim (2020) and Dukulang & Nugroho (2022). Islamic banks need to focus on effective financing risk management, such as through strategic restructuring and close monitoring of non-performing loans.

#### **The Effect of OER on ROA**

The panel data regression analysis yielded a t value of -20.128 and a chance value of 0.001, which are both less than 0.05. OER affects Islamic banking profitability. Islamic bank management uses OER to finance ROA and lower operating costs to operational income. The OER will decrease, and the ROA would increase if an Islamic bank's income improves but operating costs stay unchanged. Islamic banks manage operating expenses to maximise ROA, as seen by the positive link between OER and ROA. OER can boost profitability when operational expenses are used on productive projects like technology, training, and service growth. These expenses can elevate operational profits beyond the rise in costs themselves. Research by Sudarsono (2017), Wahyudi (2020) and Astuti (2022) indicated that OER positively influences ROA. Banks need to direct operating costs to value-added activities to drive profit growth and maintain financial stability.

#### **The Effect of NOM on ROA**

Panel data regression tests yielded a probability value of 0.685 and a t-value of 0.407, both exceeding the 0.05 level of significance. As a result, it's safe to say that Islamic banks stay profitable even with NOM. This outcome contrasts with the findings of Yusuf (2017) and Hanafia & Karim (2020), which indicated that NOM influences ROA. This may arise from the diversification of income streams, emphasis on operational efficiency, and risk management, which are goals for Islamic banks. Additional research is needed to understand the elements that impact the profitability of Islamic banks, according to the

research. A comparable study was carried out by Rahayu (2024) implying that ROA was not influenced by NOM.

### **The Effect of FDR on ROA**

There is a probability value of 0.135 and a t value of -1.511 in the panel data regression testing, which is greater than 0.05. Consequently, the profitability of Islamic banking is not influenced by FDR. The FDR is a critical banking indicator that indicates the extent to which the bank utilizes third-party funds (TPF) for financing. In Islamic banking, FDR is frequently employed to assess the allocation of funds that adhere to sharia law. The study found that FDR did not always affect Islamic bank profitability. This is because Islamic banks use fixed income murabahah contracts. Thus, an increase in FDR does not necessarily affect ROA because the murabahah contract margin is inflexible relative to financing volume. Similarly, studies were conducted by Wahyudi (2020), Astuti (2022) and Azizah (2024), to demonstrate that ROA was unaffected by FDR.

### **The Effect of Inflation on ROA**

The results of the panel data regression test were a t-value of -0.045 and a probability value of 0.965. Thus, inflation does not affect Islamic banking's profitability. Inflation often affects bank performance, especially Islamic banks. Interest rates, purchasing power, and loan demand are affected by inflation. The profitability of Islamic banks is unaffected by inflation, according to numerous studies. By dividing up profits, Islamic banks can adapt their income to fluctuating markets. Islamic banks prioritise operational efficiency to maintain profitability, unlike traditional banks, which are restricted by inflation-prone interest rates. Cost optimisation and asset management can reduce inflation. A similar investigation was performed by Suryadi (2020), Nasikin (2021) and Selayan (2023) that is, Islamic banks were profitable regardless of inflation.

### **The Effect of BI Rate on ROA**

The t-value is 0.979 and the probability is 0.331, both of which are higher than the significance level of 0.05, as determined using panel data regression testing. This means that Islamic banks' bottom lines are unaffected by the Bank Indonesia rate. Traditional banks that use interest as a revenue generator are particularly vulnerable to changes in the BI Rate. The BI Rate rarely affects Islamic bank performance indicators like ROA. This is because Islamic banks' profit-sharing model differs from conventional banks' interest system. Islamic contract margins are predetermined, therefore interest rate changes don't affect them. This study matches previous research by Zuhroh (2022) and Husein & Fahlevi (2024), findings indicated that Islamic bank profitability were unaffected by the BI Rate.

### **The Effect of GDP on ROA**

Panel data regression testing yielded a probability of 0.473, greater than 0.05, and a t value of -0.721. Thus, GDP does not affect Islamic banking's profitability. GDP is the main indicator of economic development and the macroeconomic landscape. GDP development may boost banking sector efficiency, including Islamic banks. However, many research show that GDP does not affect Islamic bank profitability. Justice and funds derived from Islamic contracts are the primary concerns of Islamic financial practices, not macroeconomic reasons. Islamic banks emphasise risk management by diversifying income streams to mitigate GDP swings. This analysis supports those by Latifah (2021) and Chandra Dewi (2023), according to both sources, Islamic banks' bottom lines are

unaffected by GDP. These results provide important implications for Islamic banking policy. Islamic banks need to continue to focus on risk management and operational efficiency rather than relying too much on macroeconomic conditions.

### Conclusion

The profitability of Islamic commercial banks, as assessed by Return on Assets (ROA), is positively and statistically significantly influenced by financial ratios such as the Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), and Operating Expense Ratio (OER), as demonstrated by this survey. All other variables also have a positive impact. This illustrates the critical role that operations and financing risk management play in the financial performance of Islamic banks. FDR and Net Operating Margin (NOM) do not influence the Return on Assets (ROA), demonstrating that profitability is not only dependent on operational or financing margins. In addition, macroeconomic variables like inflation, the BI rate, and GDP do not affect profitability, demonstrating the stability of the real sector and sharia-based Islamic banking model.

To gain greater understanding, this study advises adding variables like digital innovation or asset management quality. Research might also compare Islamic and mainstream banks or focus on economic crises. A profitability prediction model based on this study can enhance strategic decision making and policies that promote Islamic banking expansion.

### Bibliography

- Almunawwaroh, M., & Marlina, R. (2018). Pengaruh CAR, NPF dan FDR Terhadap Profitabilitas Bank Syariah Di Indonesia. *Amwaluna: Jurnal Ekonomi Dan Keuangan Syariah*, 2(1), 1–17. <https://doi.org/10.29313/amwaluna.v2i1.3156>
- Aprillia, S., Kalsum, U., & Hidayat, R. (2023). Biaya Operasional Pendapatan Operasional (BOPO) dan Capital Adequacy Ratio (CAR) Terhadap Profitabilitas Bank Umum Syariah Di Indonesia. *Balance: Jurnal Akuntansi Dan Bisnis*, 8(1), 76–84. <http://jurnal.um-palembang.ac.id/balance>
- Astuti, R. P. (2022). Pengaruh CAR, FDR, NPF, dan BOPO Terhadap Profitabilitas Perbankan Syariah. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3213. <https://doi.org/10.29040/jiei.v8i3.6100>
- Aulia, R., & Anwar, S. (2021). Pengaruh Biaya Operasional dan Pendapatan Operasional, Net Operating Margin, Dana Pihak Ketiga dan Capital Adequacy Ratio terhadap Profitabilitas Bank Syariah. *Bukhori: Kajian Ekonomi Dan Keuangan Islam*, 1(1), 21–38. <https://doi.org/10.35912/bukhori.v1i1.437>
- Azizah, S. N. (2024). Analisis Pengaruh CAR, FDR, dan NPF Terhadap Profitabilitas pada Bank Umum Syariah Di Indonesia. *Jurnal Riset Keuangan Dan Akuntansi*, 10(1), 45–57. <https://doi.org/10.25134/jrka.v10i1.9719>
- Chandra Dewi, A., Hermuningsih, S., & Wiyono, G. (2023). Analisis Faktor Penentu Profitabilitas Bank Syariah di Indonesia dengan Non Performing Financing Sebagai Variabel Moderasi. *Syntax Literate; Jurnal Ilmiah Indonesia*, 8(2), 1315–1334. <https://doi.org/10.36418/syntax-literate.v8i2.11430>
- Darsita, I. (2020). Analisis CAR, NPF, BOPO dan FDR Untuk Mengukur Tingkat Kesehatan, Serta Pengaruhnya Terhadap ROA (Studi Kasus Pada Bank Umum

- Syariah/BUS Yang Terdaftar di BEI). *Jurnal Semarak*, 3(1), 96–113. <https://doi.org/10.32493/smk.v3i1.4513>
- Dendawijaya, L. (2009). *Manajemen Perbankan*. Jakarta: Ghalia Indonesia.
- Dukalang, H. H., & Nugroho, M. A. (2022). Pengaruh FDR, Bagi Hasil, Pembiayaan Jual Beli, Sewa Menyewa dan NPF Terhadap Profitabilitas Bank Umum Syariah 2016-2020. *Account*, 9(1). <https://doi.org/10.32722/acc.v9i1.4583>
- Dwinanda, S. K., & Tohirin, A. (2021). Analisis Pengaruh Faktor Makroekonomi dan Karakteristik Bank Terhadap Profitabilitas Bank Syariah di Indonesia. *Jurnal Kebijakan Ekonomi Dan Keuangan*, 15–26. <https://doi.org/10.20885/jkek.vol1.iss1.art2>
- Endraswati, H. (2018). Gender Diversity in Board of Directors and Firm Performance: A Study in Indonesia Sharia Banks. *Review of Integrative Business and Economics Research*, 7, 299. [www.sindonews.com](http://www.sindonews.com),
- Faizal Fachri, M., & Mahfudz. (2021). Analisis Pengaruh CAR, BOPO, NPF dan FDR Terhadap ROA (Studi pada Bank Umum Syariah di Indonesia Periode Tahun 2016-2019). *Diponegoro Journal of Management*, 10(1), 1–10. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Hanafia, F., & Karim, A. (2020). Analisis CAR, BOPO, NPF, FDR, NOM dan DPK Terhadap Profitabilitas (ROA) Pada Bank Syari'ah Di Indonesia. *Target: Jurnal Manajemen Bisnis*, 2(1), 36–46. <https://doi.org/10.30812/target.v2i1.697>
- Harahap, S. S. (2013). Analisis Kritis Atas Laporan Keuangan. *Jakarta: Rajawali Pers*.
- Husen, M. S., & Fahlevi, R. (2024). Pengaruh Inflasi, BI Rate dan Nilai Tukar Mata Uang Asing Terhadap Profitabilitas Bank Syariah Indonesia. *At-Tamwil: Journal of Islamic Economics and Finance*, 3(2), 148–162. <https://doi.org/10.33558/attamwil.v3i2.10144>
- Latifah, Z., Nurdin, A. A., & Hazma, H. (2021). Pengaruh Faktor Internal dan Faktor Eksternal Terhadap Profitabilitas Dengan Mediasi NPF Bank Umum Syariah. *Indonesian Journal of Economics and Management*, 2(1), 174–187. <https://doi.org/10.35313/ijem.v2i1.3588>
- Moorcy, N. H., Sukimin, S., & Juwari, J. (2020). Pengaruh FDR, BOPO, NPF, dan CAR Terhadap ROA Pada PT. Bank Syariah Mandiri Periode 2012-2019. *Jurnal GeoEkonomi*, 11(1), 74–89. <https://doi.org/10.36277/geoekonomi.v11i1.113>
- Muhammad Irsyad, Ahmad Mulyadi Kosim, & Hilman Hakim. (2024). Pengaruh PDB (Produk Domestik Bruto), Suku Bunga, dan Inflasi Terhadap Profitabilitas Bank Syariah Periode 2014-2017. *TAFALQUH*, 3(2), 54–75. <https://doi.org/10.70032/wmnnxn29>
- Nasikin, Y., Sahudi, S., & Amris, A. (2021). Pengaruh Inflasi Terhadap Profitabilitas Pada Bank Syariah dan Bank Konvensional Periode Tahun 2015-2018. *EL MUDHORIB: Jurnal Kajian Ekonomi Dan Perbankan Syariah*, 1(1), 75–97. <https://doi.org/10.53491/elmudhorib.v1i1.91>
- Noor, J. (2012). *Metodologi Penelitian, Skripsi, Tesis, Disertasi dan Karya Ilmiah*. Kencana.
- Nurjanah, N. W., & Hendratno, H. (2018). Analisis Pengaruh Inflasi, Suku Bunga, dan Pertumbuhan Pdb Terhadap Tingkat Profitabilitas Bank Umum Syariah Di Indonesia (studi Empiris Pada Bank Umum Syariah Di Indonesia Periode 2011-2016). *EProceedings of Management*, 5(3).

- Prasaja, M. (2020). Analisis Pengukuran Rasio Keuangan dan Makro Ekonomi Terhadap Profitabilitas Bank Syariah. *Proceedings: 1st Annual Conference On Ihtifaz: Islamic Economics, Finance, and Banking (ACI-IJIEFB)*, 249–265.
- Rahayu, A. (2024). *Pengaruh CAR, NOM dan NPL Terhadap Profitabilitas (ROA) Dengan FDR Sebagai Variabel Moderating Pada Bank Umum Syariah Di Indonesia*. IAIN Salatiga.
- Selayan, A. N., Yafiz, M., & Daulay, A. N. (2023). Pengaruh Inflasi, Kurs, dan PDB terhadap Profitabilitas Bank Umum Syariah di Indonesia dengan Pembiayaan Sebagai Variabel Intervening. *Jurnal Intelektualita: Keislaman, Sosial Dan Sains*, 12(2), 145–156. <https://doi.org/10.19109/intelektualita.v12i2.19364>
- Sudarsono, H. (2017). Analisis Pengaruh Kinerja Keuangan terhadap Profitabilitas Bank Syariah di Indonesia. *Economica: Jurnal Ekonomi Islam*, 8(2), 175–203. <https://doi.org/10.21580/economica.2017.8.2.1702>
- Supardi, P. L., & Syafri. (2023). Pengaruh CAR, NPF, FDR dan BOPO Terhadap Profitabilitas (ROA) Pada Bank Umum Syariah (Studi Kasus: Bank Syariah Yang Terdaftar di OJK 2018-2022). *Jurnal Ekonomi Trisakti*, 3(2), 3243–3254. <https://doi.org/10.25105/jet.v3i2.17944>
- Suryadi, N., Mayliza, R., & Ritonga, I. (2020). Pengaruh Inflasi, Biaya Operasional Terhadap Pendapatan Operasional (BOPO), dan Pangsa Pasar Terhadap Profitabilitas Bank Umum Syariah Di Indonesia Priode 2012-2018. *Jurnal Tabarru': Islamic Banking and Finance*, 3(1), 1–10. [https://doi.org/10.25299/jtb.2020.vol3\(1\).4724](https://doi.org/10.25299/jtb.2020.vol3(1).4724)
- Syakhrun, M., Amin, A., & Anwar. (2019). Pengaruh CAR, BOPO, NPF dan FDR Terhadap Profitabilitas pada Bank Umum Syariah Di Indonesia. *Bongaya Journal of Research in Management*, 2. <https://ojs.stiem-bongaya.ac.id/index.php/BJRM>
- Wahyudi, R. (2020). Analisis Pengaruh CAR, NPF, FDR, BOPO dan Inflasi terhadap Profitabilitas Perbankan Syariah di Indonesia: Studi Masa Pandemi Covid-19. *At-Taqaddum*, 12(1), 13. <https://doi.org/10.21580/at.v12i1.6093>
- Yuliana, I. R., & Listari, S. (2021). Pengaruh CAR, FDR, Dan BOPO Terhadap ROA Pada Bank Syariah Di Indonesia. *Jurnal Ilmiah Akuntansi Kesatuan*, 9(2), 309–334. <https://doi.org/10.37641/jiakes.v9i2.870>
- Yusuf, M. (2017). Dampak Indikator Rasio Keuangan terhadap Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal Keuangan Dan Perbankan*, 13(2), 141. <https://doi.org/10.35384/jkp.v13i2.53>
- Zuhroh, I. (2022). Profitabilitas Bank Syariah Di Indonesia: Bagaimana Pengaruh Permodalan, Inflasi Dan Birate? *Jurnal Reviu Akuntansi Dan Keuangan*, 12(2), 383–399. <https://doi.org/10.22219/jrak.v12i2.21931>