

The effect of the level of Islamicity performance index on the financial performance of Islamic banks

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Abstract

Purpose - This study examines the effects of the Islamicity Performance Index (IPI) on Muamalat Indonesia's financial performance, specifically focusing on its adherence to sharia governance, sharia compliance, and sharia social indicators.

Method - The study employs a quantitative methodology, notably utilizing Autoregressive Distributed Lag statistical technique to examine secondary data. The dataset comprises quarterly time series data encompassing the period from the initial quarter of 2013Q1 to the conclusion of 2023Q2.

Result - Equitable Distribution Ratio exerts a positive impact on financial performance, while Profit-Sharing Ratio demonstrates a deleterious effect. In contrast, the Zakat Performance Ratio and the comparison between Islamic Income and Non-Islamic Income do not demonstrate statistically significant effects.

Implication - These findings emphasize the need to improve the usefulness of IPI in enhancing financial outcomes for Islamic financial institutions by addressing obstacles. The study provides insights into the difficulties faced by Islamic banks when implementing profit-sharing financing methods, while also emphasizing the significant impact of Equitable Distribution Ratios on enhancing financial performance.

Originality - This study not only examines a single element of financial ratios, as previous study has done, additionally combines two crucial ratios: ROA and ROE. The use of ARDL also offers a more detailed elucidation of the correlation between these variables.

Keywords: Islamic banking; Islamicity performance index; ROA; ROE; ARDL analysis



Introduction

The Islamic banking sector has grown significantly during the last two decades, as globally and domestically. In Indonesia, it can be seen through the growth of Islamic bank assets of 218.01% over the previous decade, followed by Third Party Funds (DPK) of 219.79% and Financing Provided (PYD) of 211.47% (OJK, 2023). This means that Islamic banks consistently make improvements, as can be seen in the graph below.

As illustrated in Figure 1, assets grew by 23.39% to a total of Rp 69.3 trillion. After that, the 20.83% increase in Third Party-Funds to Rp 49.2 trillion. Furthermore, the amount of Disbursed Loans grew by 16.46% to Rp 36 trillion. This expansion demonstrates that Islamic banks have begun to attain stability despite facing multiple crises, including the economic crisis during COVID-19.

The growth of Islamic banks, as previously explained, might be impacted by their financial performance. This performance enables organizations to analyze their capacity to make profits through regular financial reports, then allowing investors to evaluate the company's financial state (Harfiah et al., 2018). The measurement of financial performance in the banking sector, with a focus on Islamic principles can be enhanced by the utilization of the Islamicity Performance Index variable (Susanto & Pangesti, 2019).

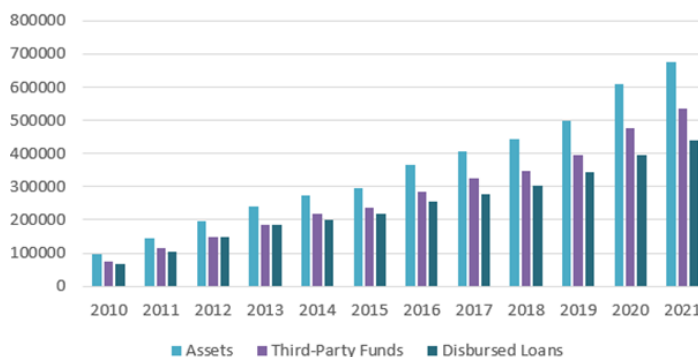


Figure 1. The growth of Islamic banks in Indonesia (in billion rupiah)

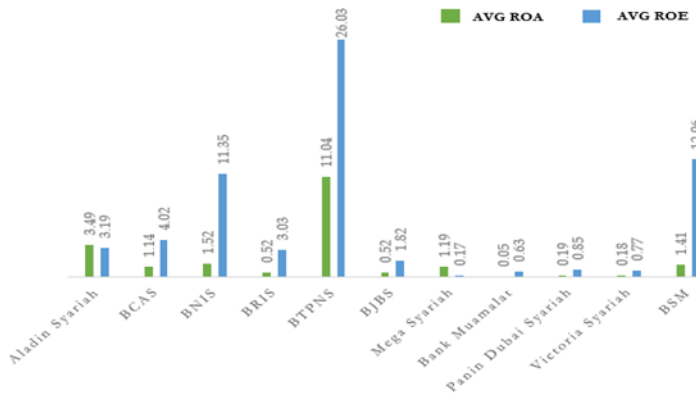


Figure 2. Comparison of Average ROA and ROE Rates of Islamic Banks in Indonesia 2018-2020 (in percentage)

Bank Muamalat as a pioneer of Islamic bank in Indonesia was founded in 1991 (Sari & Anshori, 2018). The bank has been awarded an "excellent" grade on the Islamicity Performance Index (IPI), which evaluates the firm's Islamic governance, compliance, and social aspects. The IPI comprises of Islamic Income vs. Non-Islamic Income (ISIN), Equitable Distribution Ratios (EDR), Zakat Performance Ratio (ZPR), and Profit-Sharing Ratio (PSR). Although Bank Muamalat has a strong IPI, their financial performance does not exceed expected results with a quite low ROA as shown in the graph below.

According to the data presented in Figure 2, Bank Muamalat's ROE and ROA are comparatively lower than those of other Islamic banks (Yanti et al., 2022). Even though this company is a pioneer in Indonesian Islamic banking, their ROA is only approximately 0.05% indicating a fairly limited ability to manage assets and capital efficiently in order to turn a profit. This state of affairs contradicts the extremely good rating of the Bank Muamalat's IPI.

Nainggolan et al. (2023) explain that IPI has a significant effect to sharia governance. However, Felani et al. (2020) found that the IPI depresses corporate performance. Then, Destiani et al. (2021) further discovered that IPI has negatively impacted to financial performance.

Prior studies examining the IPI have yielded inconclusive findings, which implies a potential deficiency in precision. Furthermore, an extensive investigation conducted by Yunice et al. (2023) that employed systematic literature review (SLR) methodology revealed that sharia compliance significantly influences the performance of Islamic banking. Furthermore, Hassan & Raza Rabbani (2023) underscored the significance of sharia governance implementation in Islamic banking operations as a factor influencing the intricacy of managerial decision-making in order to ensure adherence to sharia principles and financial performance.

In order to resolve these concerns, this study incorporated every IPI indicator and utilized ROA and ROE as financial performance metrics. By utilizing the Autoregressive Distributed Lag (ARDL) approach, this research surpasses previous investigations that relied on multiple linear regression in its ability to elucidate both short-term and long-term relationships (Bui et al., 2023). This study investigates the impact of the IPI and its constituents on financial performance, as measured by ROA and ROE, while holding inflation as a control variable. Moreover, the objective of this research is to provide theoretical insights and explain how IPI impacts the performance of Islamic banks. It also attempts to support Islamic banks, such as Bank Muamalat, in achieving greater operational efficiency, sharia compliance, and sustainable growth.

Literature Review

Stakeholder Theory

According to Vishwanathan & Stoelhorst (2020), stakeholder theory states that a business success depends on its relationships with organizations, individuals, and their effects. Communication and collaboration between consumers, suppliers, employees, financiers, the community, and leaders are crucial to creating and sharing value. This strategy focuses on prioritizing the most important stakeholder group when resolving conflicts of interest. Stakeholder theory can be used to study how the IPI affects Islamic bank finances. The index analyzes a bank's sharia compliance, which affects

consumers, employees, and investors. Financial institutions that improve these connections and meet stakeholder expectations according to sharia principles perform better.

Financial Performance

Financial performance can be utilized to evaluate Islamic banks (Lara, 2022). This study measured financial performance using ROE and ROA, with ROA assessing profitability based on assets (Setiawan et al., 2021). ROE measures profitability using equity (Sari & Anshori, 2018). The estimation can be written as follows:

$$ROA = \frac{\text{Net Income}}{\text{Average Total Assets}} \times 100\% \quad ROE = \frac{\text{Net Income}}{\text{Average Shareholder's Equity}} \times 100\%$$

Hypotheses Development

Islamicity Performance Index (IPI)

Islamicity Performance indicator (IPI) is an indicator that measures the performance and compliance of banks to the principles of Islamic economics in their operations (Susilowati & Falikhatun, 2023). IPI measurement can be done by considering PSR, ZPR, EDR, and ISIN indicators (Hameed et al., 2004). The calculation of these ratios can be provided as below.

Profit-Sharing Ratio (PSR)

The proportion of profits delivered to company partners is called PSR, this indicator measures how well Islamic banks have maximized profit sharing (Hameed et al., 2004). This indicator is calculated using the formula:

$$PSR = \frac{\text{Mudharabah} + \text{Musyarakah}}{\text{Total Financing}}$$

Rahayu & Kartika (2021) found that PSR significantly improved ROA. Also in a literature review of Indonesian Islamic banks, Sudirman et al. (2023) concluded that PSR significantly improved ROE. In contrast, other researches have found inconsistent findings. Hamsyi (2019) and Setiawan et al. (2021)

indicate that PSR does not significantly reduce profitability. Therefore, the hypothesis put up in this study is:

Hypotheses for the PSR variable in the ROA model:

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H0: $\beta_1 = 0$ PSR does not have a significant effect on ROA

H1: $\beta_1 \neq 0$ PSR has a significant effect on ROA

Hypotheses for the PSR variable in the ROE model:

H0: $\beta_1 = 0$ PSR does not have a significant effect on ROE

H1: $\beta_1 \neq 0$ PSR has a significant effect on ROE

Zakat Performance Ratio (ZPR)

The Zakat Performance Ratio (ZPR) is a measurement of zakat performance by calculating the distribution of zakat paid (Hayati & Ramadhani, 2021).

$$ZPR = \frac{\text{Zakat Paid}}{\text{Total Nett Assets}}$$

According to a study by Rahayu et al. (2020), ZPR has significantly positive to profitability. However, Felani et al. (2020) found that ZPR does not impact profitability. The research hypothesis can thus be deduced in the subsequent manner.

Hypotheses for the ZPR variable in the ROA model:

H0: $\beta_1 = 0$ ZPR does not have a significant effect on ROA

H1: $\beta_1 \neq 0$ ZPR has a significant effect on ROA

Hypotheses for the ZPR variable in the ROE model:

H0: $\beta_1 = 0$ ZPR does not have a significant effect on ROE

H1: $\beta_1 \neq 0$ ZPR has a significant effect on ROE

Equitable Distribution Ratio (EDR)

The Equitable Distribution Ratio (EDR) is a quantitative measure that evaluates the proportion of income distributed towards qardh (interest-free

loans), donations, labor-related expenses, and other social components (Yusnita, 2019). The equation representing the EDR is as follows:

$$EDR = \frac{\textit{Average Distribution or Each Stakeholders}}{\textit{Total Revenue}}$$

According to Setiawan et al. (2021), EDR has a beneficial impact on profitability. Conversely, Rahayu et al. (2020) proposed that EDR does not have a substantial influence on profitability. Thus, this study puts forward the subsequent hypotheses:

Hypotheses for the EDR variable in the ROA model:

H0: $\beta_1 = 0$ EDR does not have a significant effect on ROA

H1: $\beta_1 \neq 0$ EDR has a significant effect on ROA

Hypotheses for the EDR variable in the ROE model:

H0: $\beta_1 = 0$ EDR does not have a significant effect on ROE

H1: $\beta_1 \neq 0$ EDR has a significant effect on ROE

Islamic Income - Non-Islamic Income (ISIN)

The Islamic Income vs Non-Islamic Income (ISIN) is a metric that quantifies the contrast between the revenue generated by Islamic banks from sources that adhere to halal norms that are derived from activities related to the operational of productive assets (Hayati & Ramadhani, 2021). The computation is executed utilizing the subsequent formula:

$$ISIN = \frac{\textit{Halal Income}}{\textit{Total Income}}$$

Rahayu et al. (2020) found ISIN significantly improves ROA. Hamsyi (2019) adds that ISIN boosts ROE significantly. Felani et al. (2020) and Setiawan et al. (2021) observed no ISIN influences profitability. Thus, the hypotheses are:

Hypotheses for the ISIN variable in the ROA model:

H0: $\beta_1 = 0$ ISIN does not have a significant effect on ROA

H1: $\beta_1 \neq 0$ ISIN has a significant effect on ROA

Hypotheses for the ISIN variable in the ROE model:

H0: $\beta_1 = 0$ ISIN does not have a significant effect on ROE

H1: $\beta_1 \neq 0$ ISIN has a significant effect on ROE

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In the context of economic analysis, inflation as control variable is commonly evaluated by examining the consumer price indices of a specific year in relation to a reference year, as outlined by Alim (2014) and Hazam et al. (2022). The equation representing inflation is as follows:

$$INF = \frac{CPI_t - CPI_{t-1}}{CPI_{t-1}} \times 100\%$$

Yaser et al. (2021) found that inflation has a negative effect on bank profitability. While Budiarti & Syahl show that inflation has a positive effect on Thus, this study puts forward the subsequent hypotheses:

Hypotheses for the INF variable in the ROA model:

H0: $\beta_1 = 0$ Inflation does not have a significant effect on ROA

H1: $\beta_1 \neq 0$ Inflation has a significant effect on ROA

Hypotheses for the INF variable in the ROE model:

H0: $\beta_1 = 0$ Inflation does not have a significant effect on ROE

H1: $\beta_1 \neq 0$ Inflation has a significant effect on ROE

This research examines how the Islamicity Performance Index (IPI), which assesses sharia compliance, governance, and social variables, affects Bank Muamalat Indonesia's financial performance. ROA and ROE measure financial performance. The research incorporates inflation as a control variable in addition to key variables. To protect the independent and dependent variables from other influences, this control variable is added. Incorporating a control variable reduces biases when estimating independent variable coefficients (Puspitasari et al., 2020).

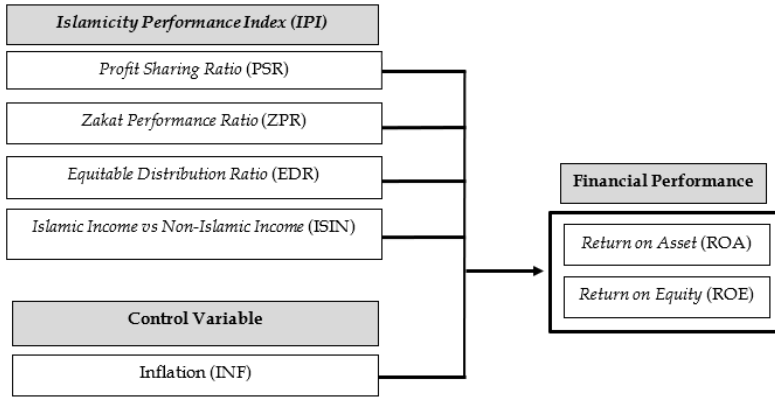


Figure 3. Research Conceptual Framework

Research Methods

A quantitative approach was used to analyze 44 quarterly secondary data from 2013 to 2023. Bank Muamalat selection uses purposive sampling based on IPI, credibility, financial performance, and data availability. This study uses PSR, ZPR, EDR, and ISIN as independent variables. ROA, ROE, and inflation are dependent and control variables.

Moreover, in the analytical framework, the term "Autoregressive" refers to the inclusion of past variables in the model, while "Distributed Lag" elucidates how changes in these variables propagate over multiple observation periods (Pesaran & Shin, 2012a). Through Autoregressive Distributed Lag analysis, this study examines how specific factors influence others concurrently and over time, facilitating a comprehensive understanding of the long-term relationships among these variables in economic time series data (Pesaran & Shin, 2012).

Table 1. Variables and Measurement Scale

Variable	Symbols	Definition	Scale
Return on Asset	ROA	Ratio assessing a financial institution's ability to generate net income from its assets.	Ratio Scale
Return on Equity	ROE	Ratio measures the extent to which a financial institution can achieve high net income for its shareholders from invested equity.	Ratio Scale
Islamicity Performance Index (IPI)	PSR, ZPR, EDR, and ISIN	<p>Islamicity Performance Index is approximated using several variables:</p> <ul style="list-style-type: none"> • PSR measures the percentage of Profit and Loss Sharing (PLS) based on total financing. • ZPR measures paid zakat based on total assets owned. • EDR measures profit distribution to stakeholders. • ISIN measures halal and non-halal income. 	Ratio Scale
Inflation	INF	A sustained general increase in the level of prices for goods and services within a specific period. Inflation involves monitoring and comparing price levels over different time frames.	Ratio Scale (Percentage)

The analytical process begins with ensuring data stationarity and selecting relevant assumptions. Lag structure is constructed, followed by Ordinary Least Squares (OLS) estimation. Residual model properties are tested for serial correlation and homoscedasticity, followed by a bounds test for cointegration confirmation. Speed of adjustment is estimated post-cointegration. ARDL analysis requires steady data, confirmed via the Augmented Dickey Fuller (ADF) test. Some variables initially show non-stationarity, necessitating lagging for stationarity. The ARDL model allows stationarity up to the first differencing level (Pesaran & Shin, 2012a; Wicesa et al., 2021).

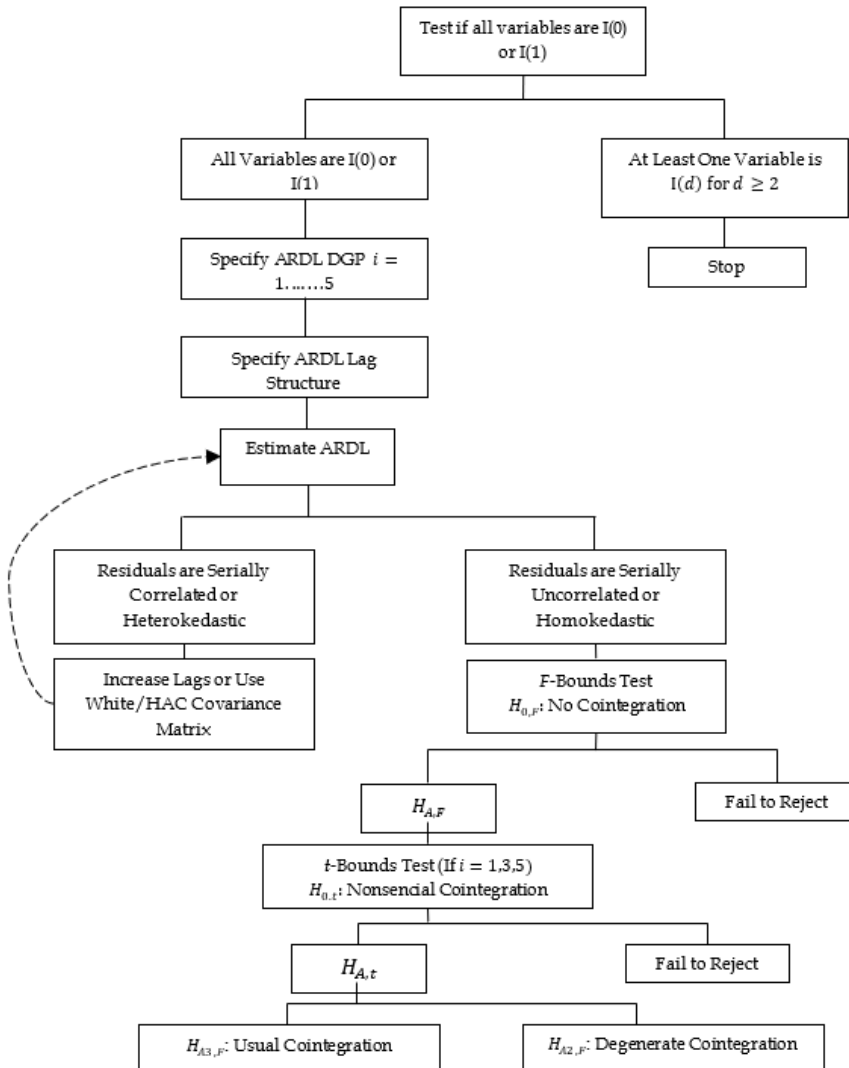


Figure 4. Autoregressive Distributed Lag Flow Chart

$$\begin{aligned} \Delta \log ROA_t = & \alpha + \sum_{k=1}^{n1} \alpha_{1k} \Delta \log ROA_{t-k} + \sum_{k=0}^{n2} \alpha_{2k} \Delta \log PSR_{t-k} + \sum_{k=0}^{n3} \alpha_{3k} \Delta \log ZPR_{t-k} \\ & + \sum_{k=0}^{n4} \alpha_{4k} \Delta \log EDR_{t-k} + \sum_{k=0}^{n5} \alpha_{5k} \Delta \log ISIN_{t-k} \\ & + \sum_{k=0}^{n10} \alpha_{10k} \Delta \log INF_{t-k} + \lambda_0 \log ROA_{t-1} + \lambda_1 \log PSR_{t-1} \\ & + \lambda_2 \log ZPR_{t-1} + \lambda_3 \log EDR_{t-1} + \lambda_4 \log ISIN_{t-1} + \lambda_9 \log Inf_{t-1} + \mu_t \end{aligned}$$

$$\begin{aligned} \Delta \log ROE_t = & \alpha + \sum_{k=1}^{n1} \alpha_{1k} \Delta \log ROE_{t-k} + \sum_{k=0}^{n2} \alpha_{2k} \Delta \log PSR_{t-k} + \sum_{k=0}^{n3} \alpha_{3k} \Delta \log ZPR_{t-k} \\ & + \sum_{k=0}^{n4} \alpha_{4k} \Delta \log EDR_{t-k} + \sum_{k=0}^{n5} \alpha_{5k} \Delta \log ISIN_{t-k} \\ & + \sum_{k=0}^{n10} \alpha_{10k} \Delta \log INF_{t-k} + \lambda_0 \log ROE_{t-1} + \lambda_1 \log PSR_{t-1} \\ & + \lambda_2 \log ZPR_{t-1} + \lambda_3 \log EDR_{t-1} + \lambda_4 \log ISIN_{t-1} + \lambda_9 \log Inf_{t-1} + \mu_t \end{aligned}$$

The following is an explanation of the mathematical model of the research above:

- $\Delta \log ROA_t$ and $\Delta \log ROE_t$ are dependent variables that are predicted or analyzed, which are the log change of ROA and ROE at time.
- $\Delta \log PSR_t$, $\Delta \log ZPR_t$, $\Delta \log EDR_t$, $\Delta \log ISIN_t$, and $\Delta \log INF_t$ are independent variables that might influence the dependent variable in the short term.
- $\Delta \log ROA_{t-k}$, $\Delta \log ROE_{t-k}$, $\Delta \log PSR_{t-k}$, $\Delta \log ZPR_{t-k}$, $\Delta \log EDR_{t-k}$, $\Delta \log ISIN_{t-k}$, and $\Delta \log INF_{t-k}$ are independent variables that have a log change in the previous time period (t-k, with k varying from 0 to n1, n2, n3, n4, n5, n6, or n10).
- α is the constant that represents an intercept or fixed value in the model.

- α_{1k} , α_{2k} , α_{3k} , α_{4k} , α_{5k} , α_{6k} , and α_{10k} are coefficients that measure the impact of changes in each independent variable on the dependent variable in the short term (in one time period).
- λ_0 , λ_1 , λ_2 , λ_3 , λ_4 , λ_5 , and λ_9 are coefficients that measure the impact of changes in each independent variable on the dependent variable in the long term (in one time period).
- μ is the error term that becomes the stochastic disturbances that may affect the dependent variable and cannot be explained by the independent variables in the model.

Results and Discussion

The Autoregressive Distributed Lag estimation process involves unit root testing, bound cointegration testing, Lagrange Multiplier testing, heteroskedasticity testing, and long-short run cointegration testing as per IHSEviews (2017). The study utilizes the Johansen cointegration test and a normality test for enhanced reliability. Stationarity in the ROA and ROE models is assessed via Augmented Dickey-Fuller (ADF) tests, ensuring suitability for ARDL estimation. Results are summarized in Table 2.

According to the data in the table 2, it can be concluded that all variables demonstrate I(1) stationarity. This suggests that while the initial INF variable may not have been stationary at the I(0) level, it becomes stationary at the I(1) level. This suggests that using the Autoregressive Distributed Lag model is appropriate for this study. The next stage entails doing the Johansen cointegration test on the table 3. The results of the Johansen test for both models show that the hypothesis of at most 1 is rejected, as the trace statistics (73.08030 for the ROA model and 92.2768 for the ROE model) surpass the critical value of 69.8189. Thus, based on a significance level of 0.05, it can be inferred that cointegration is present.

The next step involves running the bounds test, which scrutinizes the enduring cointegration connection between variables (Bui et al., 2023). The results indicate that in both models, the calculated F-statistic values exceed

the upper critical boundaries at a 5% significance level (for the ROA model $4.592642 > 3.79$, and for the ROE model $8.897276 > 3.79$). These results provide robust statistical evidence supporting the presence of long-term linkages in both theories.

Table 2. Augmented Dickey-Fuller Unit Root Test Results

Variable	I(0)		I(1)	
	ADF t-Statistic	Prob	ADF t-Statistic	Prob
ROA	-2.9876	0.0444	-5.352	0.0001
ROE	-3.7803	0.0062	-2.9558	0.0484
PSR	-3.9321	0.0041	-9.8674	0.0000
ZPR	-3.9967	0.0035	-8.2564	0.0000
EDR	-3.7228	0.0073	-8.7204	0.0000
ISIN	-3.5847	0.0104	-5.0685	0.0002
INF	-1.8051	0.3728	-5.338	0.0001

Table 3. Johansen Cointegration Test Results

<i>Johansen Cointegration Test Results for the ROA Model</i>				
Hypothesized	0.05			
No. of CE(s)	Eigenvalue	Trace-Statistic	Critical Value	Prob.**
None *	0.71959	123.94	95.7537	0.0002
At most 1 *	0.53754	73.0803	69.8189	0.0268
At most 2	0.36302	42.2323	47.8561	0.1523
At most 3	0.23612	24.1919	29.7971	0.1924
At most 4	0.17555	13.418	15.4947	0.1003
At most 5	0.13274	5.69647	3.84147	0.017
<i>Johansen Cointegration Test Results for the ROE Model</i>				
Hypothesized	0.05			
No. of CE(s)	Eigenvalue	Trace-Statistic	Critical Value	Prob.**
None *	0.72242	143.543	95.7537	0
At most 1 *	0.53043	92.2768	69.8189	0.0003
At most 2 *	0.51809	62.039	47.8561	0.0014
At most 3 *	0.38355	32.8395	29.7971	0.0216
At most 4	0.17942	13.4883	15.4947	0.0981
At most 5	0.13017	5.57837	3.84147	0.0182

Table 4. Bounds Cointegration Test Results

Model	Test Statistic	Value
ROA	F-statistic	4.59264
ROE	F-statistic	8.89728
<i>Critical Value Bounds</i>		
Significance	10 Bound	11 Bound
10%	2.26	3.35
5%	2.62	3.79
2.50%	2.96	4.18
1%	3.41	4.68

The subsequent procedure entails applying of the Lagrange Multiplier (LM) test to examine the presence of autocorrelation within the mistakes of the statistical model (Hazam et al., 2022). The LM test findings show that the Chi-Square values obtained from both models are not statistically significant at the 5% level (for the ROA model, $0.0012 > 0.05$, and for the ROE model, $0.0000 > 0.05$). This implies that the statistical model's errors may still display substantial autocorrelation patterns. Consequently, the Newey-West method, also referred to as the HAC method, was employed to implement corrective measures. The Newey-West approach is frequently used to mitigate problems related to autocorrelation and heteroskedasticity (Gujarati, 2004).

The next step is to use the Breusch-Pagan-Godfrey approach to detect heteroskedasticity in the data (Hazam et al., 2022). Heteroskedasticity can reduce estimation accuracy and statistical validity. The data do not support heteroskedasticity in either model's residuals. F-statistics are low and Chi-Square values are above 5% ($0.6854 > 0.05$ for ROA and $0.5720 > 0.05$ for ROE). Thus, we cannot reject the null hypothesis of no heteroskedasticity.

These findings suggest that within both the ROA and ROE models, there is insufficient evidence to suggest the existence of heteroskedasticity in the residuals. Consequently, the absence of heteroskedasticity does not compromise the integrity of the statistical analysis outcomes, thereby enhancing their reliability and robustness. Subsequently, a normality test is conducted to assess the extent to which the distribution of data adheres to a

normal distribution pattern. This step aims to evaluate the adequacy of the data distribution for subsequent statistical analyses and interpretations.

Table 5. Lagrange Multiplier Test Results

<i>Breusch-Godfrey Serial Correlation LM Test ROA</i>			
F-statistic	3.59234	Prob. F (2,21)	0.0573
Obs*R-squared	13.526	Prob. Chi-Square (2)	0.0012
<i>Breusch-Godfrey Serial Correlation LM Test ROE</i>			
F-statistic	9.34971	Prob. F (2, 16)	0.003
Obs*R-squared	22.4161	Prob. Chi-Square (2)	0.000

Table 6. Heteroskedasticity Test Results

<i>Heteroskedasticity Test: Breusch-Pagan-Godfrey ROA</i>			
F-statistic	0.63636	Prob. F (22,15)	0.8367
Obs*R-squared	18.3448	Prob. Chi-Square (22)	0.6854
Scaled explained SS	2.57014	Prob. Chi-Square (22)	1
<i>Heteroskedasticity Test: Breusch-Pagan-Godfrey ROE</i>			
F-statistic	0.77185	Prob. F (22,15)	0.7167
Obs*R-squared	20.1767	Prob. Chi-Square (22)	0.572
Scaled explained SS	1.96907	Prob. Chi-Square (22)	1

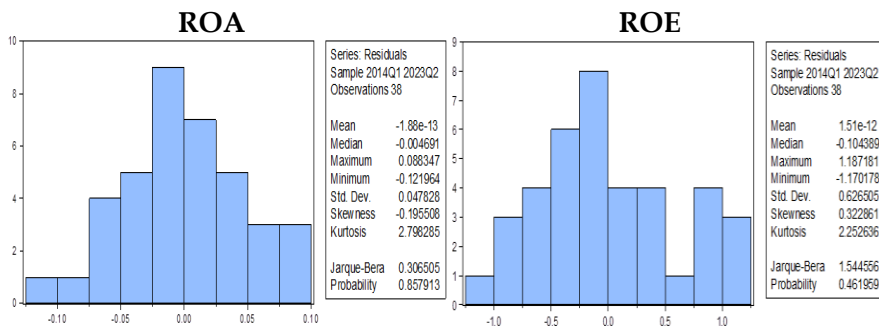


Figure 5. Normality Test Results

Figure 5 shows that both models' Probability Jarque-Bera values exceed 5% (ROA 0.857913, ROE 0.461959). So both models have normal distributions. Finally, a long-short run cointegration test estimates model variable impacts and cointegration. Interpreting this study's findings requires this stage. Short-term variable relationships are explained by the cointegrating form, while long-term variable relationships are explained by the long-run coefficients. Short-term independent factors affect long-run coefficients, hence they are calculated (Pesaran & Shin, 2012a). Long-run coefficient computations yield more accurate ARDL estimates.

Table 8. ROA and ROE Long Run Test Results

<i>ROA Long Run Coefficients</i>				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
PSR	-1.7932	0.7289	-2.4601	0.0265
ZPR	0.06914	0.08057	0.85804	0.4044
EDR	3.20503	0.80838	3.96474	0.0012
ISIN	242.133	542.136	0.44663	0.6615
INF	14.3750	1.93329	7.43551	0.0000
<i>ROE Long Run Coefficients</i>				
<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
PSR	-30.389	5.11805	-5.9376	0.0000
ZPR	0.38817	1.54351	0.25149	0.8049
EDR	58.0168	8.48872	6.83458	0.0000
ISIN	5526.12	3608.61	1.53137	0.1465
INF	185.460	31.8084	5.83054	0.0000

In Table 8, the Islamicity Performance Index (IPI) and Return on Assets (ROA) are significantly cointegrated (CointEq(-1) Probability: 0.0405 < 0.05), indicating that independent variables impact financial performance through ROA over time. PSR negatively affects financial performance (Probability 0.0265 < 0.05) via ROA, while EDR positively affects ROA (Probability 0.0012 < 0.05). ZPR and ISIN have little long-term financial influence on ROA. IPI is highly linked with Return on Equity (ROE) (CointEq(-1) Probability: 0.0000 < 0.05), suggesting that independent variables affect financial performance through ROE over time. PSR decreases ROE over time, while EDR increases it.

No long-term ROE effect from ZPR or ISIN variables on financial performance. ROA and ROE are long term affected by INF. These data demonstrate the complex relationship between independent variables and financial performance.

Based on this study's ARDL calculation, the Islamicity Performance Index (IPI) is substantially connected with financial success (ROA and ROE). These statistics indicate that IPI adjustments can have a substantial impact on Bank Muamalat's financial health. Research reveals that the IPI affects Bank Muamalat's financial performance both in the short term and the long term. In summary, IPI ratios affect ROA and ROE, but not all. This supports the study conducted by Setiawan et al. (2021) about IPI financial performance prediction. IPI forecasts, explains, and affects financial performance. The estimation results from both variables are similar, enhancing reliability.

The Impact of Profit Sharing Ratio (PSR) on Financial Performance

The analysis of ROA and ROE Long Run Test Results indicates that the variable ZPR (Zakat Performance Ratio) does not yield significant results (ROA: $0.4044 > 0.05$; ROE: $0.8049 > 0.05$), with positive coefficients observed in both models. Thus, it can be inferred that ZPR does not significantly impact the ROA and ROE models at Bank Muamalat Indonesia. Consequently, the null hypothesis (H_0) regarding the impact of ZPR on both ROA and ROE is accepted, while the alternative hypothesis (H_1) is rejected.

Shared profits and losses under Profit Loss Sharing (PLS) financing increase risk for Islamic Banks. This methodology negatively impacts profitability, especially when the fund provider pays for unrelated entrepreneur (mudharib) losses. Musharakah funding requires banks to share losses with businesses, which increases risks. Effective risk management and capital allocation in PLS-based financing improve financial performance (Hamsyi, 2019).

The decreased Mudharabah and Musharakah finance ratios at Bank Muamalat Indonesia disrupt PLS-based borrowing. Bank Muamalat Indonesia's average 10-year financing was Rp 31.604 trillion, with 2.6%

Mudharabah and 46.8% Musharakah. Thus, PLS is 49.4%, substantially lower than sharia commercial banks' 60-70% (Destiani et al., 2021; Sjam Dewi & Canggih Clara, 2022). Lower-risk financing is preferred to minimise risk, which may negatively impact PLS funding. These variables combine to lessen PSR's financial impact. An adequate PLS-based finance allocation can enhance resilience and profitability during crises notwithstanding risks. The findings support previous Islamic banking studies (Destiani et al., 2021; Felani et al., 2020; Hamsyi, 2019; U. Rahayu & Kartika, 2021).

The Impact of Zakat Performance Ratio (ZPR) on Financial Performance

The analysis of ROA and ROE long run test results indicates that the variable ZPR (Zakat Performance Ratio) yielded non-significant results (ROA: $0.4044 > 0.05$; ROE: $0.8049 > 0.05$) with positive coefficients in both models. Therefore, it can be concluded that ZPR does not significantly impact either the ROA or ROE models at Bank Muamalat Indonesia. Consequently, the null hypothesis (H₀) regarding the impact of ZPR on both ROA and ROE is accepted, while the alternative hypothesis (H₁) is rejected.

Bank Muamalat Indonesia's financial performance is minimally affected by zakat due to the difference between zakat payments and the bank's assets, as shown by zakat payment fluctuations despite generally steady overall asset values. Zakat payment was Rp 22.723 billion in 2014q4, but in 2022q1, with total assets of Rp 60.090 trillion, it decreased to Rp 714 million. The National Amil Zakat Agency (2018) calculates zakat as 2.5% of a company's assets, with a wealth threshold of 85 grammes of pure gold. Felani et al. (2020) noted that zakat payments differ from regulations, suggesting illegitimacy. For zakat distribution to affect financial performance, it must reflect earnings changes (Felani et al., 2020; Setiawan et al., 2021).

The Impact of Equitable Distribution Ratio (EDR) on Financial Performance

Based on ROA and ROE long run test findings, EDR (Equitable Distribution Ratio) showed significant findings (ROA: $0.0012 < 0.05$; ROE: $0.000 < 0.05$) with positive coefficients in both. Increasing EDR (Equity

Distribution Ratio) significantly affects Bank Muamalat Indonesia's ROA and ROE models. The null hypothesis (H0) is rejected, but the alternative hypothesis (H1) that EDR significantly influences ROA and ROE is supported.

Bank Muamalat Indonesia's Equity Distribution Rate (EDR) was 23% in average from 2013q1 to 2023q2, exceeding industry requirements for Islamic banks (Sjam Dewi & Canggih Clara, 2022). This technique boosts customer confidence and draws new customers, increasing profits. Bank Muamalat Indonesia's equitable revenue sharing includes donations and qardh finance, improving ROA and ROE. Nazli et al. (2022) argue that fair revenue allocation in Islamic Banks boosts stakeholder productivity and management (Madani, 2023; Taqiyudin, 2020). Islamic banks must allocate earnings fairly to sustain horizontal stakeholder relations, in line with Islamic principles and (Setiawan et al., 2021). This supports earlier studies on equitable revenue allocation in sharia-compliant institutions (Setiawan et al., 2021).

The Impact of Islamic Income-Non-Islamic Income (ISIN) on Financial Performance

Based on the analysis of ROA and ROE long run test results, it was found that the variable ISIN, which refers to Islamic Income-Non-Islamic Income, yielded non-significant results (ROA: $0.1465 > 0.05$; ROE: $0.1465 > 0.05$) with positive coefficients observed in both ROA and ROE. The analysis concludes that Islamic Income - Non-Islamic Income (ISIN) does not significantly influence both models, ROA and ROE, at Bank Muamalat Indonesia. Thus, the null hypothesis (H0) regarding ROA and ROE, stating that ISIN does not significantly affect ROA and ROE, is accepted, while the alternative hypothesis (H1) is rejected.

Bank Muamalat Indonesia supports Islamic standards with an average ISIN ratio of 99.98% from 2013q1 to 2023q2, including 0.02% from non-Islamic sources. Islamic Income dominates, while ISIN has little impact on the company's finances. Rahayu et al. (2020) imply that Bank Muamalat Indonesia's credibility may increase due to its high Islamic Income, but its

poor Return on Assets (ROA) of 0.33 suggests inefficient asset and liability management for revenue creation or expense reduction (Bank Indonesia and the Financial Services Authority do not classify Bank Muamalat Indonesia by ROE). However, Sudirman et al. (2023) score it "very good" in the Islamicity Performance Index (IPI) due to its Islamic orientation. As Felani et al. (2020) and Destiani et al. (2021) demonstrate, significant Islamic Income must be balanced with financial success.

The Impact of Inflation (INF) on Financial Performance

Based on the analysis of ROA and ROE long run test results, it is evident that inflation has a significant positive influence on both models (ROA and ROE). Thus, the alternative hypothesis (H1) regarding ROA and ROE, stating that inflation significantly affects ROA and ROE, is accepted, while the null hypothesis (H0) is rejected. This implies that an actual increase in inflation positively impacts the financial performance through ROA and ROE at Bank Muamalat. This is caused by inflation increasing an economy's monetary supply. The company's net income may rise, boosting ROA and ROE. However, better ROA and ROE under inflation do not necessarily mean higher profits. Inflation can devalue a company's currency and raise prices (Erdkhadifa, 2019). Inflation boosts ROA and ROE; however, this effect may be biased. Inflation may boost a company's revenue, raising ROA and ROE. Inflation reduces money's purchasing power, which negatively impacts financial performance (Yaser et al., 2021).

Conclusion

Based on the results of the study, it can be concluded that the Islamic Profit Index (IPI) has a significant and lasting positive impact on financial performance. Then Profit-Sharing Ratio (PSR) has a significant negative effect on financial performance. Furthermore, Equitable Distribution Ratio (EDR) has a significant positive effect on financial performance while Zakat Performance Ratio (ZPR) and the comparison between Islamic and Non-Islamic Income (ISIN) have no significant effect on the financial performance

of Bank Muamalat. Furthermore inflation as a control variable has a positive effect on ROA and ROE.

This finding is expected to be considered by Bank Muamalat and other Islamic banks as they work to improve their performance using the Islamicity Performance Index, with an emphasis on producing Islamic products and services to increase profitability. On the other hand, the discovery that the Profit-Sharing Ratio (PSR) has a considerable negative influence on financial performance may prompt banks to reconsider their profit-sharing policies and seek more financially advantageous solutions. Furthermore, understanding the positive impact of the Equitable Distribution Ratio (EDR) may motivate banks to pay more attention to equitable profit distribution, thus increasing customer trust and loyalty.

The theoretical implication of this study can improve our understanding of the elements that determine Islamicity Performance Index by studying variables such as IPI, PSR, and EDR, who can contribute to a better understanding of the mechanisms underlying Islamicity economic principles in banking. Meanwhile, future study is expected to extend the observation period and increase the number of research samples in order to achieve better generalization of conclusions.

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