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**THE ROLE OF ISLAMIC BANK CAPITAL STRUCTURE AND  
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**Abstract**

This study examines the impact of capital structure and financial performance of Islamic banks on price stability in Indonesia using an Autoregressive Distributed Lag (ARDL) model with quarterly data from 2014 to 2024. Key variables include the Capital Adequacy Ratio, Total Regulatory Capital, Tier 1 Capital, Risk-Weighted Assets, Net Income, and the Consumer Price Index. Long-term findings reveal that robust capital indicators enhance price stability by strengthening banks' resilience and credit capacity. In contrast, Net Income mitigates inflationary pressure in the long run but intensifies it in the short term. The error correction term confirms rapid adjustment toward equilibrium after short-term shocks. These results underscore the critical role of sound capital and profitability in reinforcing Islamic banks' contribution to Indonesia's monetary policy, offering valuable insights for policymakers and regulators in promoting macroeconomic stability.

**Keywords:** Islamic Banking, Capital Structure, Financial Performance, Price Stability



## INTRODUCTION

Price stability is widely recognized as a fundamental condition for sustainable economic development (Ukamaka et al., 2023), especially in emerging economies such as Indonesia. The Consumer Price Index, as a proxy for inflation, serves as a critical indicator for policymakers in assessing the effectiveness of macroeconomic management and ensuring public welfare (Mbilla et al., 2021). Over the past two decades, Indonesia has made significant strides in maintaining moderate inflation (Basri & Hill, 2020), however persistent challenges such as commodity price volatility, exchange rate fluctuations, and structural rigidities continue to pose risks to stable prices (Hossain & Raghavan, 2020). Against this backdrop, the role of the financial sector, particularly Islamic banking, warrants closer examination as a potential stabilizing force in the national economy (El-Galfy & Khiyar, 2012).

Islamic banks in Indonesia have grown substantially, positioning themselves as an alternative to conventional banking through their distinct concepts of profit-and-loss agreements, risk-sharing, and the ban on interest-based transactions (Faizi, 2024; Hasib et al., 2025). According to the Indonesian Financial Services Authority, the Islamic banking sector has demonstrated steady expansion in recent years. As of December 2023, Islamic banking assets represented approximately 6.9% of total national banking assets, with total Islamic banking assets reaching IDR 820 trillion (around USD 52 billion). Beyond contributing to financial inclusion and economic diversification, Islamic banks have grown more integrated into the wider financial system, supporting productive sectors and offering Shariah-compliant alternatives for savings and investment (Alhammadi, 2024). As they continue to grow, ensuring that their operations align with broader economic objectives, such as maintaining stable credit flows and enhancing financial resilience, becomes increasingly important. Understanding the ways in which capital soundness and sustained performance enable Islamic banks to fulfill these roles is therefore highly relevant for Indonesia's evolving banking landscape.

A sound capital structure is fundamental to a bank's capacity to absorb risks and remain solvent under various economic conditions (Obadire et al., 2023; Oino, 2021; Olawale, 2024). For Islamic banks, strong capital soundness is



especially critical because their business model must balance Shariah principles of risk-sharing and asset-backing with regulatory prudence. Within this structure, Total Regulatory Capital reflects the approved overall capital base to meet minimum requirements. Tier 1 Capital, which includes high-quality capital like common equity, acts as the primary buffer against unexpected losses and helps maintain public confidence in the bank's financial health (Demirguc-Kunt et al., 2013; Sari & Rahayu, 2018). To ensure that this capital aligns with the actual level of risk, Risk-Weighted Assets are used to assess the comparative risk associated with the bank's assets and to determine how much capital must be reserved to cover potential losses. Together, these elements shape the internal strength of the bank's capital framework. The Capital Adequacy Ratio (CAR) shows how well this capital base supports total risk. A healthy CAR signals sufficient capital relative to exposures, enhancing trust and supporting financial system stability (El-Ansary et al., 2019). For Indonesia's Islamic banks, upholding robust capital ratios demonstrates not only regulatory compliance but also resilience and credibility within the national financial landscape.

While capital strength provides the foundation for resilience, strong financial performance is equally essential to ensure that Islamic banks continue to fulfill their intermediation role effectively. Net Income is a vital indicator of how efficiently a bank generates profits while adhering to Shariah principles that prohibit interest and encourage ethical investment. Banks with healthy and stable earnings are better positioned to expand financing, support productive economic sectors, and sustain operations during periods of market volatility (Olawale, 2024). This ability to channel funds into real economic activity helps ease supply-side constraints that can trigger inflationary pressures, thereby indirectly supporting price stability. Moreover, sustained profitability strengthens the bank's capital base over time by enabling the accumulation of retained earnings, which in turn supports a stronger CAR and overall capital framework (Obadire et al., 2023). Together, solid performance and growing assets signal that Islamic banks are well placed to contribute not only to the expansion of ethical finance but also to the maintenance of stable macroeconomic conditions in Indonesia.

Recent studies have increasingly explored the link between bank capital strength, performance, and macroeconomic stability, particularly within



emerging markets and Islamic banking contexts. Obadire et al. (2023) emphasized that sound capital structures, guided by liquidity coverage and profitability, help African banks maintain financial stability and resilience under external shocks. Similarly, Tran et al. (2022) found that sufficient capital, particularly when combined with greater market concentration, plays a vital role in strengthening bank stability in developing economies. Van der Hoog (2018) added that robust capital requirements and prudent lending standards can mitigate excessive credit bubbles and safeguard macro-financial stability. Focusing on Islamic banking, Tekdogan & Atasoy (2021) showed that Islamic banks promote financial stability by maintaining higher liquidity buffers and providing more effective shock absorption than their conventional counterparts. Ghassan & Krichene (2017) further noted that Islamic banks demonstrated relative resilience during the 2007–2008 global financial crisis, partly due to their emphasis on risk-sharing and real-sector linkages. Supporting this, Cham (2019) found that Islamic banking growth generally dampens inflationary pressures across GCC countries, Iran, and Sudan. Omri (2022) highlighted that liquidity and financial stability reinforce each other through bidirectional causality in both Islamic and conventional banks, emphasizing the centrality of liquidity management to stability. In the Indonesian and Malaysian contexts, Majid & Hasin (2014) revealed that Islamic bank financing serves as an active channel for monetary policy transmission, complementing the conventional system despite its interest-free nature. However, Ponziani & Mariyanti (2020) showed that while Islamic deposits and financing contribute to long-run convergence for output and inflation, their short-run effectiveness in stabilizing prices is limited, suggesting that the role of Islamic banking in controlling inflation may need further strengthening.

While monetary and fiscal policies remain central to inflation control, the internal strength of the banking sector increasingly serves as a key complement to macroeconomic stability. In Indonesia, the growing role of Islamic banking amid financial inclusion efforts has received limited empirical attention regarding its impact on price stability. Prior research has focused on soundness and Shariah compliance, but rarely assessed how capital structure and performance influence inflation indicators like the Consumer Price Index (CPI). This gap is notable given



Indonesia's inflation-targeting policy and its position as the world's largest Muslim-majority country.

This study addresses the gap by empirically analyzing how Total Regulatory Capital, Tier 1 Capital, Risk-Weighted Assets, the Capital Adequacy Ratio, and Net Income relate to price stability. By linking these indicators to the CPI, the paper evaluates whether financial soundness in Islamic banks supports price stability alongside conventional tools. The findings offer policy insights for Bank Indonesia and OJK, and emphasize that capital strength and profitability are essential not only for institutional health but also for macroeconomic resilience.

## **LITERATURE REVIEW**

### **Theoretical Foundation**

This study is grounded in three main theoretical perspectives that collectively explain how banking fundamentals relate to macroeconomic stability. First, Bank Capital Theory posits that a strong capital base is essential for banks to absorb losses, maintain solvency, and ensure the smooth functioning of credit markets (King & Tarbert, 2011; Modigliani & Miller, 1958). Adequate capital acts as a cushion against unexpected shocks and strengthens public confidence in the banking system. Second, Financial Intermediation Theory highlights the role of banks as intermediaries that channel funds from savers to productive sectors. Sound financial performance, reflected in sustained profitability, enables banks to support real economic activity and promote efficient resource allocation (Diamond & Rajan, 2000). Third, Monetary Stability Theory emphasizes the link between financial system soundness and macroeconomic outcomes, particularly price stability. A resilient banking sector helps smooth credit cycles, mitigates inflationary pressures, and complements central bank policies to maintain stable prices (Friedman, 1968). Together, these theories provide the conceptual foundation for examining how the capital structure and performance of Islamic banks can contribute to macroeconomic stability in Indonesia.

### **Islamic Bank Capital Structure and Price Stability**

In the literature on banking and monetary economics, the connection between a bank's capital structure and macroeconomic stability has been



thoroughly studied. Banks are able to sustain shocks, reduce insolvency risk, and maintain stable credit flows during periods of economic uncertainty as a result of their sound capital structures (Berger & Bouwman, 2013). In the context of Islamic banking, capital adequacy is particularly significant due to its risk-sharing foundations, which discourage excessive leverage and speculative activities (Hasan & Dridi, 2010). Empirical findings suggest that stronger capital buffers, such as the Capital Adequacy Ratio and Tier 1 Capital, enhance banks' resilience, ensuring uninterrupted lending that supports monetary stability and price control (Čihák & Hesse, 2010). In developing economies, Obadire et al. (2023) and Tran et al. (2022) also highlight how banks with adequate capital are better able to maintain financial intermediation, which helps to avert inflationary surges brought on by shocks to the credit supply. Based on this theoretical foundation, the following hypotheses are proposed:

**H<sub>1</sub>:** Capital Adequacy Ratio has a long-run and short-run impact on price stability in Indonesia.

**H<sub>2</sub>:** Total Regulatory Capital has a long-run and short-run impact on price stability in Indonesia.

**H<sub>3</sub>:** Tier 1 Capital has a long-run and short-run impact on price stability in Indonesia.

**H<sub>4</sub>:** Risk-Weighted Assets have a long-run and short-run impact on price stability in Indonesia.

### **Islamic Bank Performance and Price Stability**

Financial performance, often measured by profitability indicators such as Net Income, is equally important for a bank's contribution to economic stability. Islamic banks utilise profit-and-loss sharing and asset-based financing, thereby aligning bank performance more closely with actual economic operations (Ben Jedidia, 2020). Sustained profitability enables banks to expand financing to productive sectors, helping to support supply-side capacity and dampen cost-push inflation risks (Ghassan & Krichene, 2017). Several studies have found that profitable and efficient Islamic banks can complement monetary policy by maintaining stable credit flows even during adverse economic conditions (Majid & Hasin, 2014; Ponziani & Mariyanti, 2020). Strong earnings also enable banks to build reserves and reinvest in economic sectors that stimulate growth without





fueling excessive inflation. Based on this theoretical background, the following hypothesis is formulated:

**H<sub>5</sub>:** Net Income has a long-run and short-run impact on price stability in Indonesia.

## RESEARCH METHOD

This study utilized a quantitative research methodology to examine the correlation between the capital structure of Islamic banks, their financial performance, and price stability in Indonesia. The analysis employs quarterly time-series data from the first quarter of 2014 to the fourth quarter of 2024. The focus is on Indonesia's Islamic banking sector, underscoring its growing significance within the national financial system. Data concerning bank capital structure and financial performance is obtained from the Islamic Financial Services Board (IFSB) database, which provides standardized and comparable statistics on Islamic banking institutions across member countries. The variables denoting bank capital structure are Total Regulatory Capital, Tier 1 Capital, Risk-Weighted Assets, and the Capital Adequacy Ratio. Net Income serves to encapsulate the dimension of financial performance. The study employs the Consumer Price Index (CPI) as the dependent variable to assess macroeconomic price stability, utilizing data from the Federal Reserve Economic Data (FRED) and verifying it against official statistics from the Central Bank of Indonesia for consistency and reliability. The CPI is acknowledged as a reliable measure of inflationary tendencies and hence acts as a proxy for evaluating the stability of the overall price level in the Indonesian economy (Jongwanich et al., 2019).

This study employs the Autoregressive Distributed Lag (ARDL) approach, which effectively examines dynamic relationships among variables with mixed integration orders and small to medium time-series datasets. The ARDL model estimates both short- and long-run effects, making it suitable for analyzing interactions between bank-level financial metrics and macroeconomic conditions over time (Pesaran & Shin, 1995; Demirhan, 2020). It accommodates regressors integrated at  $I(0)$  or  $I(1)$ , unlike traditional cointegration techniques that require uniform integration and large samples (Menegaki, 2019). Furthermore, the ARDL framework allows researchers to estimate simultaneously the short-run dynamics

and the long-run equilibrium relationships in the same model, which helps to elucidate the implications both immediately and in the long run (Agustina et al., 2023). This methodological flexibility, combined with its robustness in small samples, makes ARDL a widely adopted tool for applied macroeconomic and financial research.

Prior to model estimation, each variable's stationarity and integration order are verified using the Phillips-Perron (PP) and Augmented Dickey-Fuller (ADF) tests to confirm that all variables are integrated at either level  $I(0)$  or first difference  $I(1)$ , and none are  $I(2)$ , ensuring the appropriateness of the ARDL model. The existence of a stable, long-term connection is determined by the ARDL limitations test. The ARDL error correction model (ECM) computes both long-term coefficients and short-term dynamics when cointegration has been confirmed (Natsiopoulous & Tzeremes, 2024).

Mathematically, the ARDL model used in this study can be written as follows:

$$\begin{aligned}CPI_t = & \beta_{01} + \sum_{i=1}^k \beta_{11} \Delta CPI_{t-i} + \sum_{i=1}^k \beta_{12} \Delta CAR_{t-i} + \sum_{i=1}^k \beta_{13} \Delta TRC_{t-i} + \sum_{i=1}^k \beta_{14} \Delta T1C_{t-i} + \sum_{i=1}^k \beta_{15} \Delta RWA_{t-i} \\& + \sum_{i=1}^k \beta_{16} \Delta NIC_{t-i} + \theta_{11} CPI_{t-i} + \theta_{12} CAR_{t-i} + \theta_{13} TRC_{t-i} + \theta_{14} T1C_{t-i} + \theta_{15} RWA_{t-i} \\& + \theta_{16} NIC_{t-i} + \varepsilon_t \dots \dots \dots (1)\end{aligned}$$

Where  $CPI_t$  denotes the Consumer Price Index at time  $t$ , which serves as the indicator of price stability. The term  $\beta_{01}$  represents the constant or intercept of the model. The summation terms  $\sum_{i=1}^k \beta_{11} \Delta CPI_{t-i}$ ;  $\sum_{i=1}^k \beta_{12} \Delta CAR_{t-i}$ ;  $\sum_{i=1}^k \beta_{13} \Delta TRC_{t-i}$ ;  $\sum_{i=1}^k \beta_{14} \Delta T1C_{t-i}$ ;  $\sum_{i=1}^k \beta_{15} \Delta RWA_{t-i}$ ;  $\sum_{i=1}^k \beta_{16} \Delta NIC_{t-i}$ ; capture the short-run dynamic effects of the lagged changes in the Consumer Price Index, Capital Adequacy Ratio (CAR), Total Regulatory Capital (TRC), Tier 1 Capital (T1C), Risk-Weighted Assets (RWA), and Net Income (NIC), respectively. The terms  $\theta_{11} CPI_{t-i}$ ;  $\theta_{12} CAR_{t-i}$ ;  $\theta_{13} TRC_{t-i}$ ;  $\theta_{14} T1C_{t-i}$ ;  $\theta_{15} RWA_{t-i}$ ;  $\theta_{16} NIC_{t-i}$  represent the long-run coefficients for the lagged levels of these same variables. The error term  $\varepsilon_t$  is assumed to be normally distributed with zero mean and constant variance, capturing the stochastic disturbance in the model. The lag length  $k$





indicates the optimal number of lags determined using standard information criteria.

## RESULTS AND DISCUSSION

### Unit Root Test

A unit root test is crucial for preventing deceptive regressions by determining the stationary status of a time-series variable (Nkoro & Uko, 2016). The findings of this study are presented in Table 1 and are validated by the Augmented Dickey-Fuller and Phillips-Perron tests regarding the integration order of each variable.

**Table 1.**  
**Results of Unit Root Tests (ADF and PP)**

Variable	Level - I(0)		First Difference – I(1)	
	ADF	PP	ADF	PP
CPI	-3.076	-3.690***	-9.009***	-22.219***
CAR	-3.624**	-3.467*	-6.594***	-7.140***
TRC	-1.952	-2.622	-9.765***	-9.732***
T1C	-4.720***	-4.682***	-9.725***	-9.725***
RWA	-1.441	-2.779	-10.122***	-10.405***
NIC	-2.132	-5.362***	-8.604***	-10.237***

Note: \* denotes statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level.

Source: Processed data (2025)

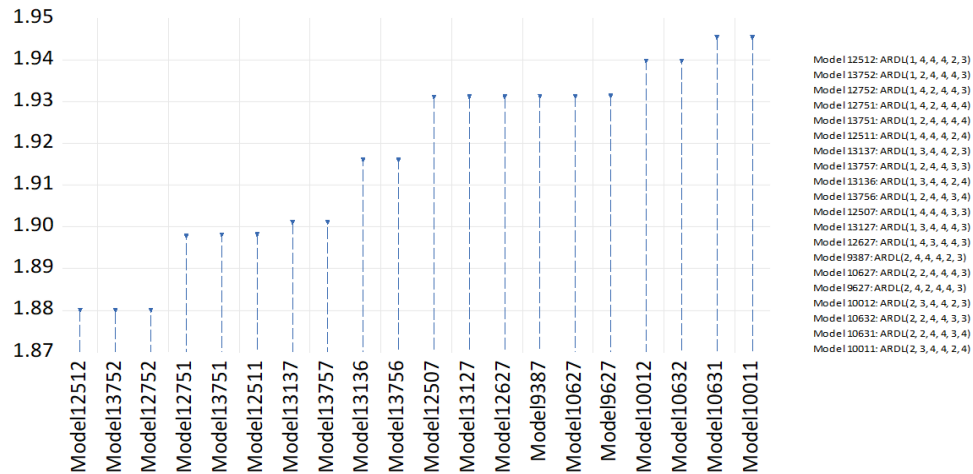
The findings show that specific variables, including T1C and NIC, demonstrate stationarity according to the ADF and PP tests, supported by significant test statistics at standard thresholds. Other variables, such as TRC and RWA, are categorized as non-stationary at the level but show stationarity following the first differencing. This verifies that the dataset contains both I(0) and I(1) series, thereby validating the application of the ARDL bounds testing methodology, which is resilient to variables with varying integration orders.

### Optimal Lag Length Selection

Selecting the right lag length captures dynamic relationships and prevents issues like autocorrelation or unnecessary complexity. The Akaike Information



Criterion (AIC) is used to balance model fit and simplicity (Khim & Liew, 2004). Figure 1 presents the top 20 lag length combinations ranked by their AIC values.



**Figure 1.**

### Lag Length Selection Based on the Akaike Information Criterion (AIC)

Source: Processed data (2025)

Model 12512, with the lowest AIC, is the optimal lag specification. The selected ARDL (1, 4, 4, 2, 3) includes one lag for CPI and varying lags for other variables. This model supports the bounds test and error correction estimation, capturing both short-run and long-run dynamics for efficient, unbiased results.

### Bound Test

The bounds testing procedure developed by Pesaran et al. (2001) assesses whether a long-term equilibrium exists among variables, regardless of whether they are  $I(0)$ ,  $I(1)$ , or a mix of both. The null hypothesis states that no long-run relationship exists. Table 2 reports the bounds test results for this study.

**Table 2.**

### Results of the Bounds Test for Cointegration

Test Statistic	Value	Level	Critical Values	
			I(0)	I(1)
F-statistic	17.410	10%	2.75	3.79
k	5	5%	3.12	4.25
		1%	3.93	5.23

Source: Processed data (2025)



As presented in Table 2, the F-statistic of 17.410 surpasses the upper critical value at the 1% significance level, resulting in the rejection of the null hypothesis of no long-run relationship. This outcome demonstrates a stable linkage among the Consumer Price Index (CPI), Islamic banks' capital structure, and their financial performance, thereby supporting the implementation of the ARDL error correction model to estimate both long-term and short-term coefficients.

### Diagnostic Test

To verify the robustness of the ARDL estimates, diagnostic tests for heteroskedasticity and serial correlation were performed to ensure the model's validity and the reliability of its coefficients. As presented in Table 3, the model passes both checks: the Breusch-Pagan-Godfrey test (p-value 0.844) indicates no heteroskedasticity, and the Breusch-Godfrey LM test (p-value 0.9137) shows no serial correlation. These outcomes confirm that the ARDL model satisfies the necessary assumptions for valid inference.

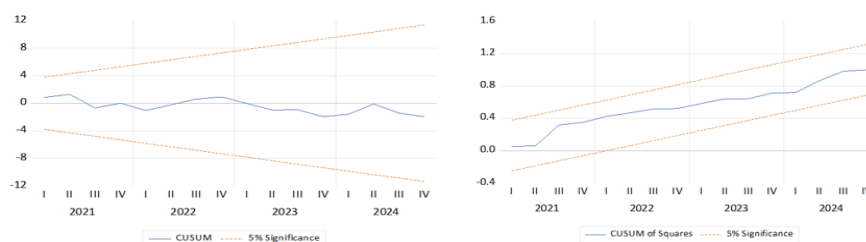
**Table 3.**

**Results of Diagnostic Tests**

Specification	F-Statistics	P-Value
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.633	0.844
Breusch-Godfrey Serial Correlation LM Test	0.090	0.9137

Source: Processed data (2025)

Additionally, the model's stability is assessed through the CUSUM (Cumulative Sum of Recursive Residuals) and CUSUMSQ (Cumulative Sum of Squares) tests. As depicted in Figure 2, both test statistics remain within the 5% significance boundaries, indicating that the model parameters are stable over time and that the ARDL estimates can be considered robust.



**Figure 2.**

**CUSUM and CUSUM of Squares Test**

Source: Processed data (2025)



### Long and Short Run Estimation Results

Following the confirmation of a long-run relationship among the variables, the ARDL model is applied to estimate the corresponding long-run and short-run coefficients. The long-run estimates reveal a stable equilibrium association between the capital structure of Islamic banks, their financial performance, and price stability. The short-run estimations reflect dynamic modifications when the system deviates from its long-run direction. CointEq indicates how quickly the system recovers from a short-run shock. Long-term and short-term dynamics are fully estimated in Table 4.

**Table 4.**

**Long-Run and Short-Run Estimation Result of the ARDL Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
<b>Long Run Estimation Result</b>				
CAR	-82.247	36.836	-2.232**	0.0412
TRC	-82.265	36.887	-2.230**	0.0414
T1C	-16.90983	12.930	-1.307	0.2107
RWA	82.037	36.839	2.226**	0.0417
NIC	8.519	1.053	8.090***	0.0000
<b>Short Run Estimation Result</b>				
$\Delta\text{CAR}_t$	-19.942	14.743	-1.352	0.1962
$\Delta\text{CAR}_{t-1}$	-75.575	20.021	-3.774***	0.0018
$\Delta\text{CAR}_{t-2}$	-8.664	2.277	-3.804***	0.0017
$\Delta\text{CAR}_{t-3}$	3.781	2.247	1.682847	0.1131
$\Delta\text{TRC}_t$	3.371	15.089	2.223**	0.0402
$\Delta\text{TRC}_{t-1}$	-75.816	20.035	-3.784***	0.0018
$\Delta\text{TRC}_{t-2}$	-29.333	3.886	-7.546***	0.0000
$\Delta\text{TRC}_{t-3}$	-28.853	3.555	-8.115***	0.0000
$\Delta\text{T1C}_t$	12.857	4.082	3.149***	0.0066
$\Delta\text{T1C}_{t-1}$	31.249	3.913	7.984***	0.0000
$\Delta\text{T1C}_{t-2}$	24.934	3.379	7.378***	0.0000
$\Delta\text{T1C}_{t-3}$	27.133	2.626	10.331***	0.0000
$\Delta\text{RWA}_t$	-14.16	15.289	-0.926	0.3689



Variable	Coefficient	Std. Error	t-Statistic	Prob.
$\Delta RWA_{t-1}$	75.444	20.017	3.768	0.0019
$\Delta NICT_t$	-5.100	0.546	-9.332***	0.0000
$\Delta NICT_{t-1}$	-4.874	0.526	-9.256***	0.0000
$\Delta NICT_{t-2}$	-2.780	0.404	-6.878***	0.0000
CointEq(-1)*	-1.405	0.105	-13.356***	0.0000
R-squared			0.737	
Adjusted R-squared			0.541	

Note: \* denotes statistical significance at the 10% level, \*\* at the 5% level, and \*\*\* at the 1% level.

Source: Processed data (2025)

### Islamic Bank Capital Structure and Price Stability

The long-run ARDL results in Table 4 show that several elements of Islamic banks' capital structure significantly affect price stability in Indonesia. First, the Capital Adequacy Ratio (CAR) has a significant negative impact on inflation (coef. = -82.247;  $p = 0.0412$ ), supporting  $H_1$ . This finding aligns with Tran et al. (2022), who found that well-capitalized banks in developing markets are more stable and less prone to generating excess credit cycles that fuel inflation. A strong CAR equips Islamic banks to absorb losses without curtailing lending abruptly, thus stabilizing credit supply and supporting steady prices. Likewise, Total Regulatory Capital (TRC) shows a significant negative effect (coef. = -82.265;  $p = 0.0414$ ), confirming  $H_2$ . This supports Obadire et al. (2023), who showed that robust capital structures help banks in Africa maintain macro-financial stability under shocks. In the Indonesian context, higher TRC implies banks can sustain intermediation during economic stress, minimizing abrupt contractions in credit that might otherwise destabilize prices.

By contrast, Tier 1 Capital (T1C) is not statistically significant in the long run (coef. = -16.910;  $p = 0.2107$ ), meaning  $H_3$  is not supported. Finally, Risk-Weighted Assets (RWA) have a significant positive long-run effect (coef. = 82.037;  $p = 0.0417$ ), confirming  $H_4$ . This implies that rapid asset expansion, if not matched with adequate capital buffers, can contribute to inflationary pressures through excessive credit creation, a pattern also highlighted by van der Hoog (2018), who found that unchecked leverage can amplify credit booms and destabilize prices.



These findings reinforce that strengthening the capital base of Islamic banks is not just an internal prudential measure but a macroeconomic necessity. Regulators should continue enforcing minimum capital ratios and rigorous asset quality assessments to contain inflation risks linked to aggressive balance sheet growth. For policymakers, the results underscore that a resilient Islamic banking sector complements monetary policy in safeguarding price stability. Practically, this implies that the Central Bank of Indonesia and the Financial Services Authority (OJK) should treat capital regulation and supervision as part of the broader inflation management framework, especially as Indonesia continues to deepen its Islamic finance sector.

In the short run, the ARDL results reveal how capital structure variables adjust price dynamics immediately and through lags. For the Capital Adequacy Ratio (CAR), the immediate coefficient  $\Delta \text{CAR}_t$  is not significant ( $p = 0.1962$ ), meaning that current-period CAR changes do not have a significant short-run effect on price stability. Although its lags ( $\Delta \text{CAR}_{t-1}$ ,  $\Delta \text{CAR}_{t-2}$ ) are significant and negative, the primary short-run decision for  $H_1$  is not supported. This implies that adjustments to capital buffers take time to influence inflation, which aligns with Cham (2019) who found that Islamic banking dampens inflation with a delayed effect rather than an instant one. Total Regulatory Capital (TRC) shows a significant immediate effect, with  $\Delta \text{TRC}_t$  positive and significant ( $p = 0.0402$ ). Therefore,  $H_2$  is supported in the short run. The negative significant lags further strengthen the conclusion that TRC changes impact prices quickly and with extended effects. This is in line with Obadire et al. (2023), who highlight that strong capital buffers can immediately stabilize liquidity flows, with a gradual tightening effect later.

Tier 1 Capital (T1C) shows a significant immediate effect:  $\Delta \text{T1C}_t$  ( $p = 0.0066$ ) is strongly significant, so  $H_3$  is supported in the short run. This suggests that changes in core equity capital have an instant impact on bank lending behavior and short-term price pressures as also noted by van der Hoog (2018). Risk-Weighted Assets (RWA) show an insignificant immediate effect ( $\Delta \text{RWA}_t$ ,  $p = 0.3689$ ). Although the first lag is significant and positive, the lack of a significant contemporaneous coefficient means  $H_4$  is not supported in the short run. Overall, the short-run analysis shows that only TRC and T1C have a direct immediate





impact on price stability. Policymakers and Islamic bank managers should prioritize these capital levers when seeking to cushion sudden inflation shocks. Meanwhile, CAR and RWA remain important for longer-term resilience but require more time to influence inflationary trends.

### **Islamic Bank Performance and Price Stability**

In the long run, Table 4 shows that the coefficient for Net Income (NIC) is 8.519 and highly significant ( $p = 0.0000$ ). The positive sign indicates that sustained profitability in Islamic banks is associated with higher price levels, likely because stronger earnings expand banks' capacity to channel funds into productive sectors, which can stimulate aggregate demand and, in turn, increase inflationary pressures. This supports  $H_5$  for the long run and aligns with Majid & Hasin (2014), who note that Islamic banks' financing effectively transmits monetary impulses to the real economy. This finding suggests that while healthy profits strengthen the banking sector's resilience and support economic growth, policymakers and Islamic banks must ensure that profit-driven credit expansion does not overheat the economy. To prevent excessive upward pressure on prices, regulators should reinforce prudent lending standards, promote effective monitoring of credit allocation, and encourage banks to balance growth with financial discipline. Islamic banks, in turn, can strengthen internal risk controls and prioritize financing that supports productive, real-sector activities without creating asset bubbles that could erode price stability over time.

In contrast, the short-run coefficient for  $\Delta NIC_t$  is -5.100, also highly significant ( $p = 0.0000$ ), with consistent negative signs for its lagged effects. This negative short-run effect implies that sudden increases in net income immediately suppress inflationary pressure. This can occur because short-term profit surges often reflect efficiency gains, cost control, or disciplined asset allocation, which limit excessive credit expansion that might otherwise fuel inflation. This evidence supports  $H_5$  in the short run.

The apparent contradiction between the positive long-run impact and the negative short-run effect shows how profitability influences price stability differently over time. This result aligns with Ponziani and Mariyanti (2020), who found that Islamic banks' deposits and financing strengthen the monetary transmission mechanism, balancing short-run price moderation and long-term



macroeconomic stability. The finding highlights that Islamic bank profitability must be managed carefully to support both operational efficiency and sustainable growth. For policymakers, this implies that encouraging steady earnings, prudent reinvestment, and real-sector financing will help ensure that profitability contributes positively to price stability across different economic cycles.

## CONCLUSION

This study investigates the effect of Islamic banks' capital structure and financial performance on price stability in Indonesia by employing quarterly data within an Autoregressive Distributed Lag (ARDL) framework. The empirical evidence suggests that the Capital Adequacy Ratio (CAR) and Total Regulatory Capital (TRC) exert significant negative influences on price stability in the long run, although their short-run impacts appear to be inconsistent. Risk-Weighted Assets (RWA) demonstrate a substantial beneficial long-term effect, although lack short-term relevance. Tier 1 Capital (T1C) seems negligible in the long term but demonstrates substantial short-term benefits, suggesting that its impact is more immediate than enduring over time. Net Income significantly impacts price stability over both time periods.

The results reveal that Net Income reduces inflationary pressures in the short run but is positively associated with price levels in the long run, suggesting that sustained profitability supports broader economic activity which can gradually stimulate price increases. These findings align with previous research emphasizing that well-performing Islamic banks can stabilize the economy by maintaining liquidity and funding productive sectors, but that their long-term expansion must be managed carefully to prevent excessive price growth. Overall, this research demonstrates that the internal financial strength of Islamic banks is not only vital for institutional resilience but also plays a meaningful role in the macroeconomic objective of price stability. By confirming that key capital structure indicators and profitability can shape both short- and long-term inflation dynamics, this study provides practical evidence to guide regulators and industry practitioners. Policymakers should therefore regard strong capital positions and sustained performance in Islamic banks as complementary tools to



conventional monetary measures, ensuring that Indonesia's Islamic banking sector remains a credible partner in safeguarding macroeconomic stability.

## REFERENCES

- Agustina, M., Majid, M. S. A., Faisal, F., & Musnadi, S. (2023). Does Islamic Banking Sector Matter for Income Disparity Reduction? Empirical Evidence from Indonesia. *International Journal of Professional Business Review*, 8(5), 1–17. <https://doi.org/10.26668/businessreview/2023.v8i5.1475>
- Alhammad, S. (2024). Islamic finance as a driver for enhancing economic sustainability and innovation in the GCC. *Journal of Science and Technology Policy Management*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JSTPM-11-2023-0206>
- Basri, C., & Hill, H. (2020). Making Economic Policy in a Democratic Indonesia: The First Two Decades. *Asian Economic Policy Review*, 15(2), 214–234. <https://doi.org/10.1111/aepr.12299>
- Ben Jedidia, K. (2020). Profit- and loss-sharing impact on Islamic bank liquidity in GCC countries. *Journal of Islamic Accounting and Business Research*, 11(10), 1791–1806. <https://doi.org/10.1108/JIABR-10-2018-0157>
- Berger, A. N., & Bouwman, C. H. S. (2013). How does capital affect bank performance during financial crises. *Journal of Financial Economics*, 109(1), 146–176. <https://doi.org/10.1016/j.jfineco.2013.02.008>
- Cham, T. (2019). Does islamic banking favors price stability? An empirical evidence from the GCC, Iran and Sudan. *Journal of Economic Cooperation and Development*, 40(2), 123–168.
- Čihák, M., & Hesse, H. (2010). Islamic banks and financial stability: An empirical analysis. *Journal of Financial Services Research*, 38(2), 95–113.
- Demirguc-Kunt, A., Detragiache, E., & Merrouche, O. (2013). Bank capital: Lessons from the financial crisis. *Journal of Money, Credit and Banking*, 45(6), 1147–1164. <https://doi.org/https://doi.org/10.1111/jmcb.12047>
- Demirhan, H. (2020). DLAGM: An R package for distributed lag models and ARDL bounds testing. *PLoS ONE*, 15(2), 1–23. <https://doi.org/10.1371/journal.pone.0228812>
- Diamond, D. W., & Rajan, R. G. (2000). A theory of bank capital. *The Journal of Finance*, 55(6), 2431–2465.
- El-Ansary, O., El-Masry, A. A., & Yousry, Z. (2019). Determinants of Capital Adequacy Ratio (CAR) in MENA Region: Islamic vs. Conventional Banks. *International Journal of Accounting and Financial Reporting*, 9(2), 287.



- <https://doi.org/10.5296/ijafr.v9i2.14696>
- El-Galfy, A., & Khiyar, K. A. (2012). Islamic banking and economic growth: A review. *Journal of Applied Business Research*, 28(5), 943–956. <https://doi.org/10.19030/jabr.v28i5.7236>
- Faizi, F. (2024). How are Islamic banking products developed? Evidence from emerging country. *Cogent Economics and Finance*, 12(1), 1–21. <https://doi.org/10.1080/23322039.2024.2378961>
- Friedman, M. (1968). The role of monetary policy. *The American Economic Review*, 58(1), 1–17.
- Ghassan, H. B., & Krichene, N. (2017). Financial Stability of Conventional and Islamic Banks: A Survey. *MPRA Paper*, No. 82372(August), 1–32. <https://mpra.ub.uni-muenchen.de/82372/>
- Hasan, M., & Dridi, J. (2010). The effects of the global crisis on Islamic and conventional banks: A comparative study. In *IMF Working Paper*. World Scientific. <https://www.worldscientific.com/doi/abs/10.1142/S1793993311000270>
- Hasib, F. F., Cahyono, E. F., & Hapsari, M. I. (2025). Trends and Implications of Islamic Bank Financing in Indonesia: A Comparative Analysis of Profit-Loss Sharing and Non-Profit-Loss Sharing Contracts (2006-2023). In *Innovative Ventures and Strategies in Islamic Business* (pp. 433–462). 10.4018/979-8-3693-3980-0.ch021
- Hossain, A. A., & Raghavan, M. (2020). The Time-Variant Sources of Inflation and Inflation Volatility and Their Interrelations and Effects on Macroeconomic Fluctuations: Evidence from Indonesia and Thailand. *Journal of Business and Economic Analysis*, 03(03), 228–267. <https://doi.org/10.36924/sbe.2020.3302>
- Jongwanich, J., Park, D., & Wongcharoen, P. (2019). Determinants of Producer Price versus Consumer price inflation in emerging Asia. *Journal of the Asia Pacific Economy*, 24(2), 224–251. <https://doi.org/10.1080/13547860.2019.1574251>
- Khim, V., & Liew, S. (2004). Which Lag Length Selection Criteria Should We Employ? *Universiti Putra Malaysia: Economics Bulletin*, 3(33), 1–9.
- King, B. P., & Tarbert, H. (2011). Basel III: An Overview. *Banking & Financial Services*, 30(5), 1–18. [http://www.weil.com/~media/files/pdfs/Basel\\_III\\_May\\_2011.pdf](http://www.weil.com/~media/files/pdfs/Basel_III_May_2011.pdf)
- Majid, M. S. A., & Hasin, Z. (2014). Islamic banks and monetary transmission mechanism in Malaysia. *Journal of Economic Cooperation and Development*, 35(2), 137–166.



- Mbilla, S. A. E., Atindaana, P. A., Gadzo, S. G., Adeniyi, A., & Salifu, I. (2021). Monetary policy and macro economic indicators: A review of a developing country's perspectives 2002–2017. *Cogent Economics and Finance*, 9(1), 1–16. <https://doi.org/10.1080/23322039.2021.1935530>
- Menegaki, A. N. (2019). The ARDL method in the energy-growth nexus field; best implementation strategies. *Economies*, 7(4), 1–16. <https://doi.org/10.3390/economies7040105>
- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(3), 261–297.
- Natsiopoulos, K., & Tzeremes, N. G. (2024). ARDL: An R Package for ARDL Models and Cointegration. *Computational Economics*, 64(3), 1757–1773. <https://doi.org/10.1007/s10614-023-10487-z>
- Nkoro, E., & Uko, A. K. (2016). Autoregressive Distributed Lag (ARDL) cointegration technique: application and interpretation. *Journal of Statistical and Econometric Methods*, 5(4), 63–91.
- Obadire, A. M., Moyo, V., & Munzhelele, N. F. (2023). An Empirical Analysis of the Dynamics Influencing Bank Capital Structure in Africa. *International Journal of Financial Studies*, 11(4), 1–21. <https://doi.org/10.3390/ijfs11040127>
- Oino, I. (2021). Bank solvency: The role of credit and liquidity risks, regulatory capital and economic stability. *Banks and Bank Systems*, 16(4), 84–100. [https://doi.org/10.21511/bbs.16\(4\).2021.08](https://doi.org/10.21511/bbs.16(4).2021.08)
- Olawale, A. (2024). Capital adequacy and financial stability: A study of Nigerian banks' resilience in a volatile economy. *GSC Advanced Research and Reviews*, 21(1), 1–12. <https://doi.org/10.30574/gscarr.2024.21.1.0346>
- Omri, M. B. (2022). Understanding the Relationship Between Liquidity and Banking Financial Stability in Islamic and Conventional Banks. *Journal of Business and Economic Options*, 5(1), 39–47.
- Pesaran, M. H., & Shin, Y. (1995). *An autoregressive distributed lag modelling approach to cointegration analysis*. Department of Applied Economics, University of Cambridge.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bound testing approaches to the analysis of long run relationships. *Journal of Applied Econometrics*, 16(3), 289–326.
- Ponziani, R. M., & Mariyanti, T. (2020). Islamic Banks and Monetary Policy: The Case of Indonesia. *IJIEF: International Journal of Islamic Economics and Finance*, 3(1), 121–142. <https://doi.org/https://doi.org/10.18196/ijief.2124>
- Sari, E., & Rahayu, S. M. (2018). The effects of Tier-1 capital, risk management, and profitability on performance of Indonesian Commercial Banks.



- International Journal of Law and Management*, 60(5), 1074–1086.  
<https://doi.org/10.1108/IJLMA-05-2017-0109>
- Tekdogan, O. F., & Atasoy, B. S. (2021). Does Islamic Banking Promote Financial Stability? Evidence from an Agent-Based Model. *Journal of Islamic Monetary Economics and Finance*, 7(2), 201–232. <https://doi.org/10.21098/jimf.v7i2.1323>
- Tran, S., Nguyen, D., & Nguyen, L. (2022). Concentration, capital, and bank stability in emerging and developing countries. *Borsa Istanbul Review*, 22(6), 1251–1259. <https://doi.org/10.1016/j.bir.2022.08.012>
- Ukamaka, O. B., Asomba, I. U., & Kelechukwu, A. E. (2023). Price Stability and Economic Development in Nigeria: Issues and Challenges. *Journal of Policy and Development Studies*, 14(2), 56–69. <https://doi.org/10.4314/jpds.v14i2.5>
- van der Hoog, S. (2018). The Limits to Credit Growth: Mitigation Policies and Macroprudential Regulations to Foster Macrofinancial Stability and Sustainable Debt. *Computational Economics*, 52(3), 873–920. <https://doi.org/10.1007/s10614-017-9714-4>