

RPIM Policy and MSME Financing: Evidence from Indonesian Islamic Banks

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ABSTRACT

This study aims to evaluate the impact of the Macroprudential Inclusive Financing Ratio (RPIM) policy on the financing behavior and inclusivity performance of Islamic Commercial Banks (BUS) in Indonesia, particularly in supporting the 30% MSME financing target mandated by Bank Indonesia. Using a quantitative approach with quarterly time-series data from 2016Q1 to 2024Q4 sourced from OJK, Bank Indonesia, BPS, the World Bank, and WHO, the study applies the Autoregressive Distributed Lag (ARDL) model to analyze short-run and long-run relationships between MSME financing and several determinants, including bank-specific factors (FDR, NPF, ROA), macroeconomic indicators (GDP, inflation, BI Rate), and policy dummies representing RPIM implementation and the COVID-19 pandemic. The results reveal that the RPIM policy has a positive effect on total MSME financing but does not significantly increase its proportion relative to total financing. The policy's impact is more evident in working capital financing than in investment financing, suggesting that Islamic banks tend to expand short-term, liquidity-oriented MSME loans rather than long-term investments. These findings imply that while the RPIM policy has improved financing volumes, achieving structural inclusivity requires enhanced policy incentives and risk-sharing mechanisms to encourage long-term MSME investment. This study contributes to the literature by providing empirical evidence on the early effectiveness of the RPIM policy in Indonesia's Islamic banking sector and offering policy insights for strengthening inclusive and sustainable financing.

Keywords : ARDL, Islamic banking, MSME financing, RPIM policy.

INTRODUCTION

Global economic growth in both developed and developing countries has consistently been driven by the private sector (Zamhari et al., 2023). Within this sector, Micro, Small, and Medium Enterprises (MSMEs) serve as the main engine, accounting for up to 95% of business units, employing 70% of the workforce, and contributing 50% to the world's economic output (Alibhai et al., 2024). In Indonesia, MSMEs play an even more significant role, comprising 99% of business units, contributing 60.5% to the national GDP, and dominating employment absorption (Amanda et al., 2022; Meilantika et al., 2024).

Despite their substantial contribution, MSMEs face limited access to financing (Agustin et al., 2023). Capital constraints hinder their expansion, innovation, and business sustainability (Huang et al., 2022; Mahmoud et al., 2024). Yet, financing

serves as a vital instrument supporting MSMEs productivity and competitiveness (Gichuki et al., 2014). In this context, the role of financial institutions—particularly Islamic Commercial Banks (BUS)—becomes strategic. BUS not only contribute to the real sector but also possess a fundamental advantage through the application of Sharia principles, which promote the productive use of wealth and prohibit usury (Nurlaeli & Sarpini, 2022; Piskha et al., 2018; Suretno & Bustam, 2020).

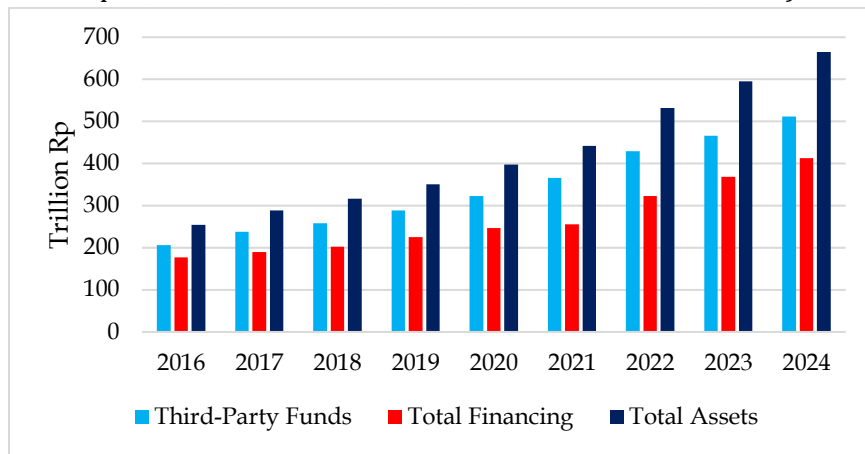


Figure 1. Performance of Islamic Commercial Banks in Indonesia (2016-2024)
Source: OJK, 2025

Figure 1 shows that the assets, third-party funds (DPK), and financing of BUS experienced consistent growth during the 2016-2024 period. This confirms the capacity of BUS to channel financing, including to MSMEs (Yusron et al., 2023). However, the MSME financing remains relatively small. As of December 2024, total MSME financing amounted to only IDR 80.95 trillion, far below non-MSME financing of IDR 332.30 trillion (OJK, 2024). In fact, MSME financing by Islamic banks has been proven to stabilize more quickly during monetary shocks (Ramadhan & Beik, 2013).

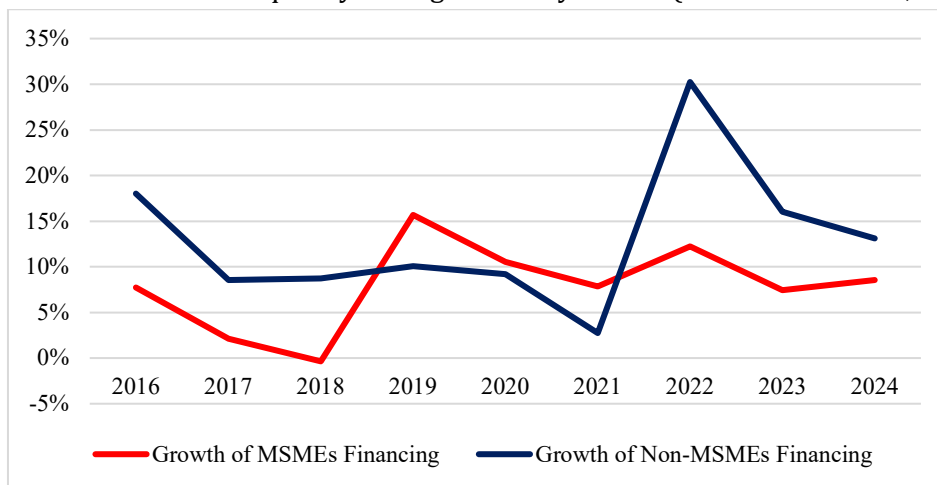


Figure 2. Comparison of MSME and Non-MSME Financing Growth of Islamic Commercial Banks (2016-2024)

Source: OJK, 2025

Working capital and investment financing for MSMEs hold significant growth potential, even though their contribution to total MSME financing remains relatively low. This potential is supported by data on the growth BUS financing from 2016 to 2024. Its strength was particularly evident during the 2021 pandemic crisis. During that period, MSME financing continued to grow by 7.85%, while non-MSME financing slowed sharply to 2.74%. Moreover, MSME growth demonstrated greater stability, avoiding the extreme volatility seen in non-MSME financing—which surged up to 30.21% in 2022—and instead maintaining a solid growth rate of 12.26% (OJK, 2024).

To strengthen the banking sector’s contribution to MSMEs, Bank Indonesia introduced the Macroprudential Inclusive Financing Ratio (RPIM) policy through Regulation No. 23/13/PBI/2021. This policy mandates a minimum of 30% of banks’ financing allocation to the MSMEs sector (BI, 2021). However, its realization has yet to reach the optimal target (Siradju et al., 2023). This condition indicates a gap between the vital role of MSMEs and the relatively low financing allocation they receive from BUS.

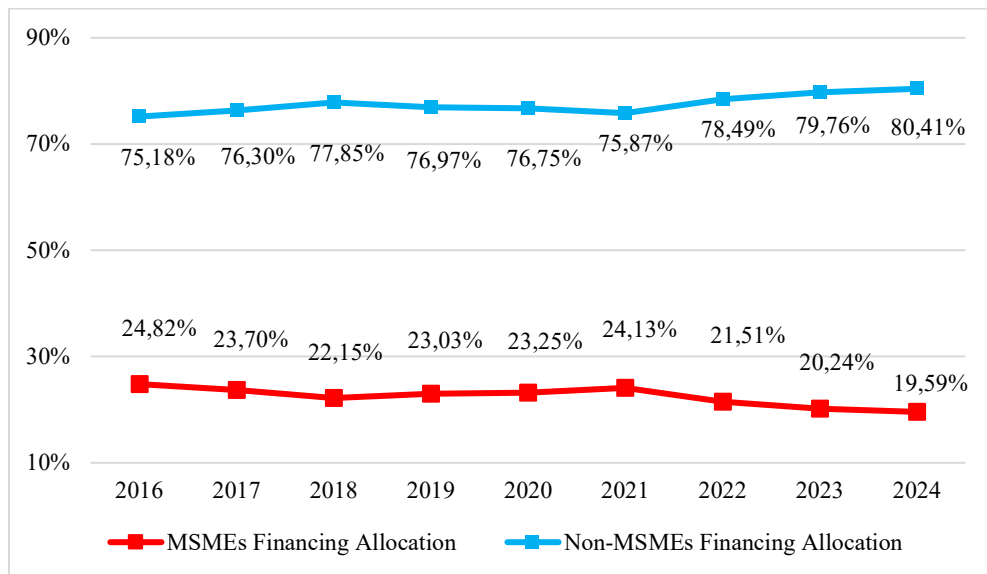


Figure 3. Comparison of Total Financing Allocation in Islamic Commercial Banks (2016–2024)

Source: OJK, 2025

The main objective of this study is to evaluate the impact of the Macroprudential Inclusive Financing Ratio (RPIM) policy on the financing behavior and inclusivity performance of BUS in Indonesia. Specifically, the research aims to assess whether the implementation of the RPIM policy has been effective in supporting the achievement of the 30% MSME financing target mandated by Bank Indonesia. By examining both internal bank factors and external macroeconomic conditions, the study seeks to understand how this policy influences the allocation of

financing to the MSME sector and whether it successfully promotes inclusive and sustainable growth within the Islamic banking industry.

This study is anchored in macroprudential policy theory, financial intermediation theory, and Islamic financial principles, which together explain how regulatory frameworks and banking dynamics influence MSME financing behavior in Islamic Commercial Banks (BUS). From the macroprudential perspective, the Macroprudential Inclusive Financing Ratio (RPIM) policy reflects the central bank's goal of maintaining financial stability while promoting inclusivity. As noted by Lim et al. (2011) and Claessens (2015), macroprudential tools are designed not only to contain systemic risk but also to channel credit toward productive sectors such as MSME. Bank Indonesia's Regulation No. 23/13/PBI/2021 operationalizes this principle by requiring banks to allocate at least 30% of their financing to MSMEs, ensuring equitable credit distribution across sectors.

The loanable funds theory further supports the relationship between liquidity and credit expansion (Gurley & Shaw, 1960; Wicksell, 1962). In this context, the Financing to Deposit Ratio (FDR) represents how effectively banks mobilize deposits into productive financing. A higher FDR indicates better intermediation efficiency, which supports increased MSME financing—a finding consistent with Yudiansyah et al. (2022). Meanwhile, the profitability theory of financial intermediation suggests that banks' lending behavior is shaped by their efforts to maximize returns while managing risks, implying that profitability indicators such as ROA play a critical role in determining credit allocation (Klein, 1971; Sealey & Lindley, 1977).

Within Islamic financial intermediation, the *maqāṣid al-sharī'ah* framework emphasizes justice, equitable wealth distribution, and productive use of assets (Chapra, 2016). Islamic banks are therefore expected to direct financing toward real-sector activities, including MSMEs, aligning social and economic objectives. The RPIM policy embodies this principle by reinforcing Islamic banks' role in advancing inclusive and sustainable economic development.

In summary, the theoretical foundation integrates macroprudential, intermediation, and Islamic finance perspectives to explain how internal bank performance, macroeconomic conditions, and regulatory interventions jointly shape MSME financing. It provides the conceptual basis for testing whether the RPIM policy enhances inclusivity and promotes long-term sustainable financing in Indonesia's Islamic banking sector.

The conceptual framework of this study illustrates the relationship between banks' internal factors, macroeconomic conditions, regulatory policies, and external shocks on MSME financing by BUS. Internal factors include FDR, NPF-MSME, and ROA; macroeconomic factors consist of GDP, inflation, and the BI Rate; while Bank Indonesia Regulation No. 23/13/PBI/2021 and the COVID-19 pandemic are modeled as dummy variables. The relationships among these variables are summarized in the following figure.

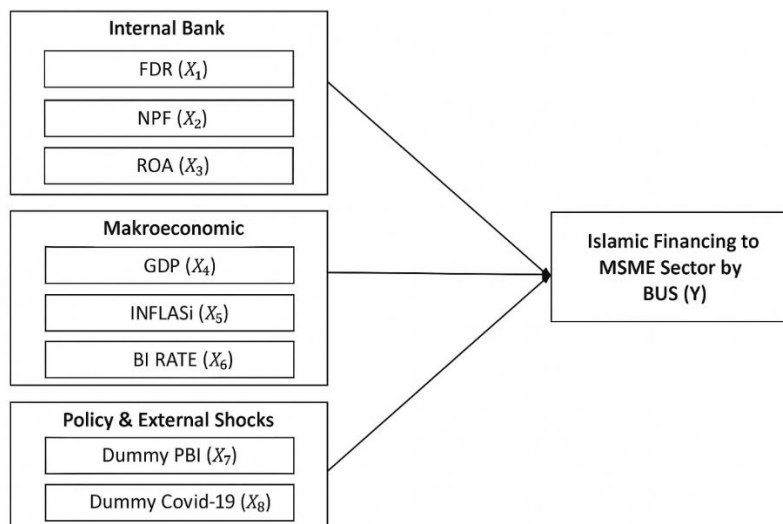


Figure 4. Conceptual Framework

Micro, Small, and Medium Enterprises (MSMEs) have long been recognized as key contributors to economic development, job creation, and poverty reduction (Alibhai et al., 2024; Amanda et al., 2022). However, the persistent financing gap remains one of the most critical barriers to their growth, particularly in emerging economies like Indonesia (Tambunan, 2017). Scholars have emphasized that MSME financing behavior depends on both internal banking factors—such as liquidity, profitability, and non-performing loans—and macroeconomic and regulatory environments, including monetary policy and government interventions.

Several studies have examined these dynamics in Indonesia. Yudaruddin (2020) found that bank-specific variables such as profitability and liquidity significantly affect MSME lending, while macroeconomic variables like inflation and GDP also play crucial roles in shaping bank credit behavior toward MSMEs. His findings indicate that bank ownership structure also matters, with state-owned banks showing different risk and lending patterns than private ones. Complementing this, Yudiansyah et al. (2022) demonstrated that the FDR and NPF have a significant influence on the growth of MSME financing in Islamic banks, where higher liquidity supports financing expansion while higher NPF constrains it. Their results further reveal that capital adequacy positively affects MSME financing, underscoring the role of internal bank stability in promoting inclusive credit growth.

At the macro level, Ismanto et al. (2024) explored the determinants of MSME credit access from Indonesian banks through the lens of agency theory. Their findings suggest that bank stability, operational efficiency, and capital structure play pivotal roles in improving MSME credit accessibility. High operating costs tend to discourage banks from lending to MSMEs, while stable and well-capitalized banks are more inclined to extend financing to this segment. These insights align with international evidence from Yıldırım (2025), who applied the ARDL bounds testing approach to

Türkiye and found that GDP and consumer confidence positively affect MSME loans, while business confidence (RSCI) can negatively influence them under uncertain economic conditions. The study emphasizes that macroeconomic sentiment and policy credibility are critical in sustaining MSME credit expansion. The literature also highlights the importance of government and regulatory interventions in sustaining MSME financing during economic shocks. Zubaedah et al. (2024) examined the effectiveness of Indonesia's Financial Services Authority (OJK) stimulus policies during the COVID-19 pandemic and found that credit restructuring programs were instrumental in preventing widespread defaults among MSMEs and stabilizing bank lending performance. The findings reinforce the need for responsive regulatory frameworks that protect both financial stability and MSME resilience during crises.

Despite these valuable insights, existing studies have primarily focused on conventional determinants of MSME financing—such as liquidity, profitability, and macroeconomic indicators—without fully assessing the effectiveness of macroprudential inclusivity policies such as Indonesia's Macroprudential Inclusive Financing Ratio (RPIM). Few have examined whether such structural policies can genuinely shift Islamic banks' lending behavior toward more inclusive and sustainable financing targets. This study addresses that gap by analyzing the impact of RPIM on the financing behavior of BUS, focusing on both the proportion and volume of MSME financing. Furthermore, by disaggregating MSME financing into working capital and investment components, this study contributes a novel perspective on how regulatory inclusivity influences short-term versus long-term financing patterns in Islamic banking.

Hypothesis:

- H₁: FDR has a significant positive effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₂: ROA has a significant positive effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₃: NPF has a significant negative effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₄: GDP has a significant negative effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₅: Inflation has a significant negative effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₆: The BI Rate has a significant negative effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₇: PBI has a significant positive effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).
- H₈: COVID-19 has a significant negative effect on Islamic financing for the MSME sector by Islamic Commercial Banks (BUS).

RESEARCH METHOD

This study employs a quantitative method using secondary time series data from the first quarter of 2016 to the fourth quarter of 2024. The data were obtained from OJK, Bank Indonesia (BI), Statistics Indonesia (BPS), the World Bank, and the World Health Organization (WHO). The analysis was conducted using the Autoregressive Distributed Lag (ARDL) method developed by Pesaran and Shin (1995) to examine the long-run relationships and short-run adjustments in time series data that are stationary at level (I(0)) or integrated of order one (I(1)). Data processing was carried out using Microsoft Excel 360 and EViews 10. The ARDL model used in this study is as follows:

- a. Short-run ARDL model:

$$\begin{aligned} \Delta MSME_t = & \alpha + \sum_{i=1}^{p-1} \varphi_i^* \Delta MSME_{t-i} + \sum_{j=0}^{q_1-1} \beta_{1j}^* \Delta FDR_{t-j} + \sum_{j=0}^{q_2-1} \beta_{2j}^* NPF_{t-j} \\ & + \sum_{j=0}^{q_3-1} \beta_{3j}^* \Delta ROA_{t-j} + \sum_{j=0}^{q_4-1} \beta_{4j}^* \Delta GDP_{t-j} + \sum_{j=0}^{q_5-1} \beta_{5j}^* \Delta Inflation_{t-j} \\ & + \sum_{j=0}^{q_6-1} \beta_{6j}^* BIRATE_{t-j} + \beta_7^* \Delta D_PBI_t + \beta_8^* \Delta D_COVID_t + \lambda (MSME_{t-1} \\ & - \mu_1 FDR_{t-1} - \mu_2 NPF_{t-1} - \mu_3 ROA_{t-1} - \mu_4 GDP_{t-1} - \mu_5 Inflation_{t-1} \\ & - \mu_6 BIRATE_{t-1} - \mu_7 D_PBI_{t-1} - \mu_8 D_COVID_{t-1}) + u_t \end{aligned}$$

- b. Long-run ARDL model:

$$MSME_t = \alpha_0 + \alpha_1 t + \beta_1 FDR_t + \beta_2 NPF_t + \beta_3 ROA_t + \beta_4 GDP_t + \beta_5 Inflation_t + \beta_6 BIRATE_t + \beta_7 D_PBI_t + \beta_8 D_COVID_t + u_t$$

Description of Variables:

$MSME_t$ = Islamic financing for the MSME sector by Islamic Commercial Banks (BUS) at time t

FDR_{t-i} = Financing to Deposit Ratio (FDR) at time t (%)

ROA_{t-i} = Return on Assets (ROA) at time t (%)

NPF_{t-i} = Non-Performing Financing (NPF) at time t (%)

$BIRATE_{t-i}$ = Indonesian interest rates (BI Rate) at time t (%)

GDP_{t-i} = Gross Domestic Product (GDP) at time t (%)

$INFLASI_{t-i}$ = Inflation rate at time t

D_PBI_{t-i} = Dummy variable for the implementation of Bank Indonesia Regulation (PBI) at time t

D_COVID_{t-i} = Dummy variable for the COVID-19 pandemic period at time t

Δ = Change (first difference)

t = Time period

α, α_0	= Constants
$\beta_{\{ij\}}, \varphi_i$	= Short-run coefficients for the i-th lag of variable j
$\mu_1, \mu_2, \dots, \mu_7$	= Long-run coefficients
λ	= Coefficient of the Error Correction Term (ECT)
ECT_{t-1}	= Error Correction Term (ECT) from the previous period
u_t	= Error term / residual

RESULT AND DISCUSSION

Result

The stationarity test results indicate that all variables are stationary at the first difference level, with probability values below the 5% significance level. Based on these stationarity test results, the ARDL approach can be applied. The ARDL approach proposed by Pesaran and Shin (1997) can be employed regardless of whether the regressors are purely I(0), purely I(1), or a combination of both I(0) and I(1).

Tabel 1. Results of Stationarity Test

Variables	Probability	
	Level I(0)	First Difference I(1)
MSME	0.40	0.00***
FDR	0.18	0.00***
NPF	0.01	0.00***
ROA	0.17	0.00***
GDP	0.26	0.01**
INFLASI	0.06	0.05*
BIRATE	0.11	0.02**
D_PBI	0.81	0.00***
D_COVID	0.54	0.00***

Source: Processed data (2025)

Note: ***, **, and * indicate significance levels at 1%, 5%, and 10%, respectively.

The multicollinearity test was conducted by comparing the Variance Inflation Factor (VIF) values of the variables against the threshold value of 10. It was found that all correlation values were below 10, indicating no correlation among the independent variables. Therefore, the model is free from multicollinearity.

Tabel 2. Results of Multicollinearity Test

Variables	VIF
FDR	6.55
NPF	2.79
ROA	3.33
GDP	3.48
INFLASI	1.75
BIRATE	3.79

D_PBI	3.09
D_COVID	5.82

Source: Processed data (2025)

The approach used in the cointegration test is the bounds test. The bounds test compares the F-statistic value with the lower bound (I(0)) and upper bound (I(1)) values. The model is considered to have cointegration if the F-statistic value exceeds the upper bound I(1) value. Based on the results of the bounds test, the F-statistic value is 4.228484. This value is higher than all significance levels of the upper bound I(1), indicating that the model exhibits cointegration, or in other words, a long-run relationship.

Tabel 3. Results of Cointegration Test

F-Bounds Test				
Test Statistic	Value	Signif.	I(0)	I(1)
<i>F-Statistic</i>	4.228484	10%	1.85	2.85
		5%	2.11	3.15
		2.5%	2.33	3.42
		1%	2.62	3.77

Source: Processed data (2025)

The Jarque-Bera test results show that the probability value of the F-statistic in the ARDL model is 0.59, which is greater than the 5% significance level. Therefore, it can be concluded that the data are normally distributed.

Tabel 4. Results of Normality Test

	Probability
Normality	0.59

Source: Processed data (2025)

The Breusch-Godfrey test shows that the probability value of the F-statistic in the ARDL model is 0.113, which is greater than the 5% significance level. This indicates that there is insufficient statistical evidence to suggest the presence of autocorrelation in the model.

Tabel 5. Results of Autocorrelation Test

	Probability
Autocorrelation	0.113

Source: Processed data (2025)

Based on the results of the Breusch-Pagan-Godfrey test, the probability value is 0.60, which is much greater than 0.05. This indicates that the model exhibits homoskedasticity.

Tabel 6. Results of Heteroscedasticity Test

	Probability
Heteroscedasticity	0.60

Source: Processed data (2025)

The next step is testing using the Error Correction Model (ECM) to analyze the short-run relationship and the ARDL analysis to examine the long-run relationship. The optimal lag of the model is ARDL(1, 1, 1, 0, 0, 1, 1, 1, 1) with an Akaike Information Criterion (AIC) value of 0.475675.

Tabel 7. Short-Run ARDL Estimation Results of Proportion of MSME Financing/Total Financing

Variables	Coefficient	Probability
D(FDR)	0.02	0.89
D(NPFUMKM)	0.48	0.27
D(ROA)	-0.51	0.56
D(GDP)	18.71	0.48
D(IHK)	-49.48	0.00***
D(BIRATE)	-0.32	0.02**
D(D_PBI)	0.79	0.00***
D(D_COVID)	-0.86	0.00***
CointEq(-1)*	-0.26	0.00***
R-squared	0.84	
Adjusted R-squared	0.81	

Source: Processed data (2025)

Note: ***, **, and * indicate significance levels at 1%, 5%, and 10%, respectively.

Table 7 presents the short-run estimation results of the ARDL model for the proportion of MSME financing to total financing in Islamic Commercial Banks (BUS). The results show that the inflation variable (D(IHK)), BI Rate (D(BIRATE)), the RPIM policy dummy (D_PBI), and the COVID-19 dummy (D_COVID) are statistically significant. Inflation (D(IHK)) and BI Rate (D(BIRATE)) have negative coefficients, while the RPIM policy dummy (D_PBI) shows a positive coefficient, and the COVID-19 dummy (D_COVID) has a negative coefficient.

Other variables, including FDR (D(FDR)), NPF-MSME (D(NPFUMKM)), ROA (D(ROA)), and GDP (D(GDP)), are statistically insignificant in the short run. The coefficient of the error correction term (CointEq(-1)) is -0.26 with a probability value below 1%, indicating the existence of an adjustment mechanism toward long-run equilibrium. The model produces an R-squared value of 0.84 and an adjusted R-squared value of 0.81, suggesting a high explanatory power of the model.

Tabel 8. Long-Run ARDL Estimation Results of Proportion of MSME Financing/Total Financing

Variables	Coefficient	Probability
<i>FDR</i>	0.38	0.17
<i>NPF</i>	2.94	0.55
<i>ROA</i>	-0.50	0.69
<i>GDP</i>	11.78	0.68
<i>IHK</i>	127.86	0.00***

<i>BI_RATE</i>	0.19	0.70
<i>D_PBI</i>	-5.07	0.28
<i>D_COVID</i>	1.62	0.23
<i>C</i>	-799.36	0.10

Source: Processed data (2025)

Note: ***, **, and * indicate significance levels at 1%, 5%, and 10%, respectively.

Table 8 presents the long-run estimation results of the ARDL model for the proportion of MSME financing to total financing in Islamic Commercial Banks (BUS). The results show that among all variables included in the model, only inflation (IHK) is statistically significant at the 1% level. The remaining variables, namely FDR, NPF, ROA, GDP, BI Rate, RPIM policy dummy (*D_PBI*), and COVID-19 dummy (*D_COVID*), are statistically insignificant in the long run. The constant term (*C*) has a negative coefficient with a probability value of 0.10. Overall, the estimation results indicate that the ARDL model successfully captures the long-run relationship between the variables included in the study.

The robustness test refers to an examination of how sensitive the estimated regression coefficients are to modifications in the model specification, such as adding or removing variables (Lu & White, 2014). Its purpose is to assess the structural validity of the model. In this study, the robustness test was conducted after the main ARDL estimation model of the MSME financing proportion to total financing. The test was performed by decomposing the dependent variable—total MSME financing by Islamic Commercial Banks (BUS)—into two components: working capital financing and investment financing. The estimation results show that most independent variables became statistically insignificant when the model was applied separately to each component.

Table 9. Long-Run ARDL Estimation Results for Total MSME Financing

Variables	Coefficient	Probability
<i>FDR</i>	0.01	0.02**
<i>NPF</i>	-0.23	0.15
<i>ROA</i>	0.44	0.00***
<i>GDP</i>	-3.53	0.00***
<i>IHK</i>	1.34	0.01**
<i>BI_RATE</i>	-0.02	0.01**
<i>D_PBI</i>	0.09	0.05*
<i>D_COVID</i>	0.01	0.62
<i>C</i>	66.07	0.00***

Source: Processed data (2025)

Note: ***, **, and * indicate significance levels at 1%, 5%, and 10%, respectively.

The long-run estimation results presented in Table 9 show several significant relationships between the independent variables and total MSME financing by Islamic Commercial Banks (BUS), which differ from the results of the MSME financing

proportion model shown in Table 8. The FDR has a positive and significant effect at the 5% level in the total MSME financing model, indicating that higher liquidity utilization by banks is associated with an increase in MSME financing. In contrast, the same variable in the proportion model was statistically insignificant, suggesting that liquidity conditions influence the total amount of financing more strongly than the share of MSME financing relative to total loans.

The ROA is positive and highly significant at the 1% level in the total financing model, while it was negative and insignificant in the proportion model. This difference implies that bank profitability affects the overall expansion of MSME financing but does not significantly alter the share of MSME financing within total portfolios. GDP shows a negative and highly significant coefficient at the 1% level in the total MSME financing model, whereas it was positive but insignificant in the proportion model. This contrast suggests that macroeconomic growth influences the volume of MSME financing differently from its relative proportion.

The inflation rate (IHK) remains significant and positive in both models; however, its coefficient in the total MSME financing model is smaller in magnitude compared to the proportion model. This consistency indicates that inflation exerts a persistent influence on MSME financing, regardless of the model specification. Meanwhile, the BI Rate displays a negative and significant effect in the total financing model, but it was positive and insignificant in the proportion model, reflecting that monetary policy changes affect the absolute level of financing rather than its composition.

The RPIM policy dummy (D_PBI) is positive and significant at the 10% level in the total financing model but negative and insignificant in the proportion model. This finding implies that the introduction of the Macroprudential Inclusive Financing Ratio policy has been more effective in increasing the total value of MSME financing rather than its share of total bank financing. The COVID-19 dummy (D_COVID) remains insignificant in both models, suggesting that its long-term impact on MSME financing has diminished over time.

The constant term (C) is positive and highly significant in the total financing model, whereas it is negative and insignificant in the proportion model, further emphasizing structural differences between the two specifications. Overall, these results indicate that when MSME financing is measured in absolute terms, several internal and macroeconomic variables become more influential, whereas their effects are muted when MSME financing is expressed as a proportion of total financing.

Tabel 10. Long-Term ARDL Estimation Results for Working Capital Financing and Investment of MSMEs

Variables	MSME Working Capital Financing		MSME Investment Financing	
	Coefficient	Probability	Coefficient	Probability
			t	

<i>FDR</i>	0.01	0.02**	0.02	0.00***
<i>NPF</i>	-0.23	0.15	0.14	0.40
<i>ROA</i>	0.44	0.00***	0.03	0.77
<i>GDP</i>	-3.53	0.00***	0.35	0.81
<i>IHK</i>	1.34	0.02**	4.66	0.00***
<i>BI_RATE</i>	-0.02	0.01**	-0.05	0.03**
<i>D_PBI</i>	0.09	0.05*	0.07	0.18
<i>D_COVID</i>	0.01	0.62	0.01	0.78
<i>C</i>	66.07	0.00***	-22.43	0.32

Source: Processed data (2025)

Note: ***, **, and * indicate significance levels at 1%, 5%, and 10%, respectively.

Table 10 presents the long-run estimation results for MSME working capital financing and investment financing by Islamic Commercial Banks (BUS). The estimation reveals notable differences in the determinants and significance levels between the two financing types. For MSME working capital financing, several variables are statistically significant. The FDR shows a positive and significant effect at the 5% level, indicating that higher liquidity utilization is associated with increased working capital financing. The ROA is also positive and highly significant at the 1% level, while the inflation rate (IHK) has a positive and significant effect at the 5% level. Conversely, GDP has a negative and highly significant coefficient at the 1% level, and the BI Rate exhibits a negative and significant effect at the 5% level. The RPIM policy dummy (D_PBI) is positive and significant at the 10% level, while the COVID-19 dummy (D_COVID) is not statistically significant.

In contrast, for MSME investment financing, the FDR and inflation rate (IHK) both have positive and highly significant effects at the 1% level, similar to working capital financing. However, the ROA and GDP are insignificant, suggesting that profitability and macroeconomic growth have a weaker long-run association with MSME investment financing. The BI Rate remains negative and significant at the 5% level in both models, indicating a consistent sensitivity to monetary policy changes. The RPIM policy dummy (D_PBI) and COVID-19 dummy (D_COVID) are also insignificant for investment financing, implying that policy and external shocks have a limited long-term effect on this component.

Overall, working capital financing is influenced by a broader range of factors, including internal bank performance (ROA), macroeconomic variables (GDP, inflation, BI Rate), and policy interventions (RPIM), whereas investment financing is mainly affected by liquidity (FDR), inflation, and interest rate movements. This comparison highlights that Islamic banks' allocation behavior differs between short-term operational financing and long-term investment financing within the MSME sector.

Discussion

The discussion begins with the examination of the RPIM policy variable (dummy PBI), which represents the implementation of Bank Indonesia Regulation No. 23/13/PBI/2021 on the Macroprudential Inclusive Financing Ratio. Since the main objective of this study is to evaluate the impact of this policy on the financing behavior and inclusivity performance of Islamic Commercial Banks (BUS), the results across models provide a comprehensive view of its effectiveness.

In the proportion model of MSME financing (Table 8), the dummy PBI variable shows a negative but statistically insignificant coefficient. This implies that, despite the policy's mandate requiring at least 30% of total bank financing to be allocated to MSMEs, its implementation has not yet resulted in a measurable increase in the share of MSME financing relative to total financing. In other words, while BUS may have expanded their financing portfolios, the proportion directed specifically toward MSMEs has remained largely unchanged. This condition suggests the existence of a regulatory inertia or compliance gap in achieving the inclusivity target. The finding is consistent with Siradju (2023), who identified that the effectiveness of the RPIM policy in Islamic banks has been limited by factors such as risk perception, collateral constraints, and the concentration of financing in low-risk corporate sectors.

However, when MSME financing is examined in absolute terms (Table 9), the dummy PBI becomes positive and statistically significant at the 10% level. This change indicates that while the policy has not yet succeeded in altering the structural proportion of MSME financing, it has effectively encouraged an increase in the total value of MSME financing. The result demonstrates that Islamic banks responded to the RPIM regulation by expanding MSME credit volumes, albeit not sufficiently to raise the ratio to total financing. This partial effectiveness aligns with the findings of Ismal (2022), who observed that macroprudential instruments in Indonesia tend to influence bank behavior through volume adjustments before structural reallocation occurs. It also resonates with Agustin et al. (2023), who noted that financial inclusion policies often yield incremental rather than transformational changes during their early implementation phase.

The robustness analysis further strengthens this interpretation by disaggregating MSME financing into working capital and investment components (Table 10). The results show that the RPIM dummy is positive and significant at the 10% level for working capital financing, but insignificant for investment financing. This indicates that the RPIM policy has been more effective in stimulating short-term operational financing rather than long-term investment lending. Such a pattern is consistent with the practical behavior of Islamic banks, which tend to channel inclusive financing into low-risk, high-turnover segments that align with liquidity and capital adequacy requirements. The result also supports Wulandari et al. (2022), who found that Islamic banks' inclusive financing tends to prioritize micro and small working capital needs due to their faster repayment cycles and lower default

exposure.

Taken together, the findings suggest that the RPIM policy has had a positive but selective impact on the financing behavior of Islamic banks. It has succeeded in expanding MSME credit volumes, particularly for working capital purposes, yet it has not significantly shifted the overall allocation structure toward the 30% target set by Bank Indonesia. The differential effect between working capital and investment financing highlights the challenge of achieving deep inclusivity, as the policy's influence appears concentrated in short-term financing rather than in long-term, productive investments that could strengthen MSME resilience and sustainable growth.

From a policy perspective, these results imply that while the RPIM framework has been effective in motivating compliance behavior among Islamic banks, further refinements are needed to enhance its structural impact. Strengthening incentive mechanisms—such as differential risk-weighted asset requirements, profit-sharing schemes, or government guarantees—could encourage BUS to diversify their MSMEs portfolios beyond short-term financing. The inclusion of targeted support for investment-oriented MSMEs could also help transform the RPIM from a quantitative compliance tool into a qualitative driver of inclusive and sustainable growth. In summary, the RPIM policy has proven to be a crucial step toward inclusive financing in the Islamic banking sector, but its current implementation primarily fosters volume expansion rather than proportional inclusivity

CONCLUSION AND RECOMMENDATION

This study concludes that the Macroprudential Inclusive Financing Ratio (RPIM) policy has had a positive yet partial impact on the inclusivity performance of Islamic Commercial Banks (BUS) in Indonesia. The policy has succeeded in increasing the total value of MSME financing but has not significantly raised its proportion relative to total bank financing, indicating that the 30% target has not yet been fully achieved. The effect is stronger on working capital financing, while investment financing remains less responsive, suggesting that banks prioritize short-term, lower-risk lending.

These findings imply that the RPIM policy has encouraged compliance behavior rather than structural transformation in MSME financing. The study also recognizes that factors such as liquidity, profitability, inflation, and interest rate conditions influence the effectiveness of this policy. Limitations include the use of aggregate time-series data and the inability of the dummy variable to capture varying levels of policy implementation.

Future research should examine bank-level or regional responses to the RPIM, incorporate qualitative insights from practitioners, and assess the broader social and economic outcomes of inclusive financing. Strengthening policy incentives and risk-sharing mechanisms will be crucial to transform RPIM from a compliance instrument

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into a driver of sustainable and equitable growth in Indonesia's Islamic banking sector.

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