



THE NEXUS BETWEEN ISLAMIC BANK FINANCING FOR MSMEs AND REGIONAL POVERTY REDUCTION: EVIDENCE FROM INDONESIA

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ABSTRACT

This study examines the nexus between Islamic bank financing and regional poverty reduction in Indonesia, addressing the critical gap in evidence-based policy during the post-pandemic recovery. Utilizing a balanced panel dataset of 33 provinces from 2020 to 2024, the research employs a Fixed Effect Model (FEM) with Cluster-Robust Standard Errors to ensure empirical rigor. The results demonstrate that while total Islamic financing significantly reduces poverty rates—confirming its role in wealth redistribution Islamic MSME financing exhibits a significant positive correlation. Rather than indicating intermediation failure, this study clarifies that such results reflect a strategic pro-poor targeting phenomenon, where Islamic financial institutions proactively penetrate high-poverty regions to fulfill their social inclusion mandate. Furthermore, the findings reveal a fiscal-monetary divergence, where regional government expenditure shows persistent inefficiencies in contrast to the positive externalities of population agglomeration. This study contributes to the literature by providing a nuanced understanding of the dual-objective nature of Islamic banking and offers a novel framework for integrating Sharia-based financial inclusion with regional development strategies. The findings provide a mandate for policymakers to synchronize fiscal allocations with Islamic financial ecosystems to foster sustainable economic independence.

1. INTRODUCTION

Poverty remains a pivotal structural challenge in Indonesia's economic development, notwithstanding the improving national trends. According to the latest release from the Indonesian Central Bureau of Statistics (BPS) in March 2025, the national poverty rate was recorded at 8.47%, encompassing 23.85 million people, while extreme poverty was successfully suppressed to 0.85%. However, these aggregate figures mask profound regional disparities; the poverty rate in rural areas (11.03%) significantly exceeds that of urban sectors (6.73%). Spatially, the inter-provincial gap remains wide, with poverty rates ranging from 3.72% in Bali to a staggering 30.03% in Highland Papua. This condition is further exacerbated by the rising Poverty Gap Index (P1) and Poverty Severity Index (P2) in urban areas, indicating that while the total number of poor individuals has declined, the average expenditure gap and distribution inequality among the urban poor have notably widened. Amidst efforts to reduce the national Gini ratio to 0.375, this paradox of regional inequality suggests that economic growth has not been fully inclusive, necessitating more effective wealth redistribution instruments to reach populations below the national poverty line, which currently averages IDR 609,160 per capita per month (BPS, 2025).

Such regional inequalities and the widening poverty gap indices indicate a failure in policy transmission to reach the most vulnerable segments of society. In this context, Islamic banking emerges as a strategic alternative solution through intermediation principles rooted in the real sector and distributive justice. Unlike the conventional system, which tends to be profit-oriented and concentrates capital within the financial sector, Islamic banking prioritizes risk-sharing principles and the prohibition of *riba* (usury), which are theoretically capable of correcting such wealth disproportions (Anjum, 2022; Purwanto et al., 2025; Purwanto et al., 2026). Theoretically, the role of financial intermediation in poverty reduction is often

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framed within the Finance-Growth-Poverty nexus, where indexed international discourse such as Rizvi et al. (2020) and Arshed & Kalim (2021) contends that Islamic finance offers a superior mechanism for social equity due to its intrinsic link to productive assets. Through its financing instruments, Islamic financial institutions hold a moral mandate to channel liquidity directly into productive regional activities, thereby narrowing the poverty gap currently escalating in urban areas and serving as a catalyst for welfare improvement in rural regions (Purwanto & Yanuar, 2017; Hasnita et al., 2025). However, empirical investigations by Durohman et al. (2025) and Dharmayanti et al. (2024) indicate that the transmission of these benefits is often highly contingent upon regional institutional quality and the mitigation of information asymmetry.

A review of previous literature examining the relationship between Islamic finance and poverty reveals three primary tendencies. First, studies focusing on the macro-aggregate level generally suggest that Islamic banking contributes positively to poverty reduction via economic growth; however, they often fail to elucidate the specific distributional mechanisms operating at the local level (Bochner, 2025; Syahrir et al., Wahyudi et al., 2023; Yunus et al., 2025). Second, there is a body of literature highlighting financial inclusion through MSMEs financing as a key variable, yet the results remain sectoral and inconsistent, with some studies finding insignificant impacts due to accessibility constraints and high transaction costs for low-income populations (Dela-Cruz et al., 2025; Lu et al., 2022). Third, most prior research has relied on standard econometric models that assume regional homogeneity, thereby frequently overlooking residual variance and the unique dynamics occurring at the regional level (Zuhroh & Malik, 2023; Rosalina & Wibowo, 2025). These diverse findings and methodological limitations underscore the urgency of re-evaluating the effectiveness of Islamic bank financing for the MSMEs sector through a robust panel data regression approach.

Despite the enormous potential of Islamic banking, there is still a significant research gap regarding the effectiveness of financing in the MSME sector at the regional level. Specifically, there is a lack of theoretical clarity regarding the paradox of inclusion, where increased financing penetration sometimes correlates with high poverty indices—a phenomenon often mislabeled as a failure of intermediation. Most prior studies have relied on national aggregate data, often yielding contradictory findings concerning the impact of the micro-sector on poverty. Furthermore, the inherent heterogeneity across Indonesian provinces is frequently overlooked in standard econometric models, despite regional characteristic variations being a primary driver of serious heteroskedasticity issues (Triwibowo & Oktaviani, 2022). This study advances existing knowledge by re-characterizing Islamic MSMEs financing not merely as a commercial product, but as a strategic Pro-poor Targeting instrument that addresses market failures where conventional risk-assessment models typically fail. This study addresses these empirical voids by employing a robust panel data approach that accounts for cross-regional variance disturbances. By utilizing a panel data framework, this research provides more precise and accurate estimates of the role of Islamic MSMEs financing in alleviating poverty, ensuring that the findings are both statistically reliable and contextually relevant.

Therefore, the primary objective of this study is to provide a profound analysis of the influence of Islamic banking intermediation represented by total financing and MSMEs sector financing compared to the effectiveness of regional fiscal policies in reducing poverty rates across 33 Indonesian provinces. While previous studies often examine fiscal and monetary policies in isolation (Afonso et al., 2024), this study provides a comprehensive advancement by integrating both into a singular comparative framework. By encompassing an observation period that captures the dynamics of economic recovery, this research offers empirical evidence on whether Islamic financial instruments are more responsive to regional poverty pockets. The findings of this study are expected to serve as a strategic reference for policymakers in synchronizing the roles of Islamic banking and regional fiscal policy to achieve sustainable poverty alleviation targets.

2. METHODS

Research Design

This study employs a quantitative approach with an explanatory design aimed at examining the causal relationship between Islamic banking intermediation and poverty alleviation. The research strategy utilizes macro-econometric analysis leveraging secondary data. The focus is directed at the regional level to capture spatial and temporal variations in the implementation of Islamic banking across Indonesia.

To ensure the validity of statistical inference, the research design adopts a Fixed Effect Model (FEM) estimation procedure combined with the Cluster-Robust Standard Errors approach (Yoon & Galvao, 2020). This design adjustment serves as a mitigation step against the characteristics of regional panel data, which exhibit high levels of heterogeneity (heteroskedasticity). Consequently, the resulting causal relationships maintain the properties of the Best Linear Unbiased Estimator (BLUE) (Han & Kim, 2023). Thus, this design not only elucidates the direction of relationships between variables but also ensures the robustness of the estimated parameters against variance instability across provinces.

Data Types and Sources

This study utilizes secondary data in a balanced panel format, covering 33 provinces in Indonesia over the observation period from 2020 to 2024. Data for Islamic banking intermediation variables, which include total financing and specific financing for the Micro, Small, and Medium Enterprises (MSMEs) sector, are sourced from the Islamic Banking Statistics reports published periodically by the Financial Services Authority (OJK). Meanwhile, regional macroeconomic indicators, including poverty rates, population size, unemployment rates, and economic growth (GRDP), are obtained from the official database of the Indonesian Central Bureau of Statistics (BPS). Regarding the fiscal policy dimension, data on regional expenditure realization are accessed through the official portal of the Directorate General of Fiscal Balance (DJP) under the Ministry of Finance of the Republic of Indonesia. All monetary variables in this study are transformed into natural logarithms to ensure variance stability and to align the measurement scales within the econometric model.

Population and Sample

The population of this study encompasses all provinces in Indonesia, utilizing a purposive sampling technique that includes 33 provinces. Four newly established provinces in the Papua region were excluded from the observation to maintain longitudinal consistency and ensure time-series continuity. The observation period spans from 2020 to 2024, a crucial timeline that captures the economic dynamics during the COVID-19 pandemic and the subsequent national economic recovery phase. With this design, the research generates a balanced panel dataset with a total of 165 observations (33 provinces × 5 years). This sample size provides an optimal degree of freedom, allowing for model parameter estimates that remain stable, consistent, and capable of accurately capturing behavioral variations across regions (Lichti et al., 2021).

Operational Definition and Measurement of Variables

To ensure empirical clarity and replicability, the operational definitions of the key variables used in this study are explicitly defined as presented in Table 1.

Table 1. Operational Definition and Measurement of Variables

Variable Type	Variable	Symbol	Operational Definition	Unit
Dependent	Poverty	Pov	Measured as the Poverty Headcount Ratio (P_0), which represents the percentage of the population living below the provincial poverty line. This data is sourced from the Indonesian Central Bureau of Statistics (BPS).	%
Independent	MSMEs Financing	Ln MSMEs	Specifically refers to the Sharia-based financing allocated to Micro, Small, and Medium Enterprises. This variable captures the bank's commitment to the productive sector at the grassroots level.	Ln (IDR)
	Total Financing	LnFin	Defined as the total volume of financing disbursed by Sharia Commercial Banks (BUS) and Sharia Business Units (UUS) in	Ln (IDR)

Control	Regional Government Expenditure	LnGE	each province, expressed in natural logarithms (Ln) to ensure data normality. Total provincial government expenditure, utilized as a proxy for regional fiscal policy intervention.	Ln (IDR)
	Population	LnPop	The natural logarithm of the total number of residents residing in the province during the observation year.	Ln (Jiwa)
	Economic Growth	GRDP	The annual growth rate of the Gross Regional Domestic Product at constant prices, representing macroeconomic performance.	%
	Unemployment	Unplo	The Open Unemployment Rate (OUR), calculated as the percentage of unemployed individuals relative to the total labor force.	%

Model Specification

The functional relationship between the variables in this study is formulated into a panel data regression model with linear-log and linear-linear specifications as follows:

$$Pov_{it} = \alpha + \beta_1 LnMSMEs_{it} + \beta_2 LnFin_{it} + \beta_3 LnGE_{it} + \beta_4 LnPop_{it} + \beta_5 GRDP_{it} + \beta_6 Unplo_{it} + \varepsilon_{it} \quad (1)$$

Where

- i* : Cross-sectional entity (33 Provinces in Indonesia).
- t* : Time dimension (Period from 2020 to 2024).
- α : The constant or model intercept.
- $\beta_1 \dots \beta_6$: Regression coefficients indicating the elasticity or the direction of the influence of independent variables.
- Ln* : Natural Logarithm transformation used to normalize the data scale.
- ε_{it} : The error term or model residual, assumed to satisfy the normal distribution assumption.

Data Analysis Techniques

Data analysis was performed comprehensively using STATA 17 software. To ensure empirical clarity, the key variables were operationalized as follows: Poverty (Pov) is measured by the Headcount Ratio (P₀); Total Islamic Financing (LnFin) and MSMEs Financing (LnMSMEs) are expressed in natural logarithms (Ln) to account for normality; and Regional Expenditure (LnGE) serves as the fiscal policy proxy. Given the data structure, which combines time-series and cross-sectional dimensions, the econometric procedure employed was panel data regression analysis (Karabiyik et al., 2019). The analytical stages were designed systematically as follows:

Model Estimation and Selection

The procedure began by comparing three primary approaches: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). To determine the most consistent model, the Chow Test was conducted to compare CEM and FEM, followed by the Hausman Test to validate the efficiency between FEM and REM (Widarjono, 2018). The Hausman test serves as the primary justification for model selection; a significant p-value (p < 0.05) indicates that the Fixed Effect Model (FEM) is the most appropriate approach. The utilization of this approach ensures that the estimated parameters are unbiased by unobserved heterogeneity across Indonesian provinces.

Diagnostic and Classical Assumption Testing

Once the optimal model was established, econometric prerequisite tests were performed to guarantee the criteria of the Best Linear Unbiased Estimator (BLUE). The testing included the multicollinearity test using the Variance Inflation Factor (VIF)—where a value below 10 indicates the absence of redundant information between independent variables. Additionally, the Wooldridge autocorrelation test for serial correlation and the Modified Wald heteroskedasticity test were applied (Badawaire et al., 2024). Given that regional data characteristics frequently exhibit non-constant residual variance, this study proactively adopted Cluster-Robust Standard Errors estimation. This step aimed to correct standard error bias without discarding crucial information from the Fixed Effect model, thereby ensuring that statistical inferences

remained valid despite the presence of heteroskedasticity and potential serial correlation (Yoon & Galvao, 2020).

Significance Testing and Statistical Evaluation

Hypothesis evaluation was conducted through partial significance tests (t-tests) to measure the individual influence of Islamic bank financing for the MSMEs sector and other variables on poverty (Purwanto, 2020). The simultaneous significance test (F-test) was applied to assess the overall reliability of the model (van Ginkel, 2019). Finally, the goodness-of-fit was measured using the coefficient of determination (R^2), representing the extent to which variations in provincial poverty can be explained by the dynamics of the independent variables within the model (Huy, 2025).

3. RESULTS AND DISCUSSIONS

Descriptive Statistics Analysis

Table 2 presents the summary of descriptive statistics for all research variables across 33 Indonesian provinces during the 2020–2024 observation period.

Table 2. Descriptive Statistics of Research Variable (N=165)

Variable	Mean	Std. Dev.	Min	Max
Poverty (Pov)	10.24	5.17	3.9	27.12
MSMEs Financing (LnMSMEs)	6.51	2.03	1.79	9.97
Total Financing (LnFin)	8.34	1.65	4.77	12.37
Regional Expenditure (LnGE)	8.86	0.81	7.49	11.16
Population (LnPop)	8.48	0.96	7.03	10.83
Economic Growth (GRDP)	3.92	4.24	-9.34	22.94
Unemployment (Unplo)	5.01	1.59	1.83	10.01

Source: Research Data (2026)

Based on Table 2, the dependent variable, poverty (Pov), shows an average value of 10.24%. Interestingly, there is a wide range between the minimum (3.90%) and maximum (27.12%) values, indicating significant regional welfare disparities in Indonesia. The primary independent variable, Islamic MSMEs financing (LnMSMEs), has a mean of 6.51 with a standard deviation of 2.03. This relatively high standard deviation compared to total financing (1.65) suggests that the distribution of Sharia-based productive credit for the lower-middle sector is not yet evenly spread across all provinces. Furthermore, economic growth (GRDP) recorded an average of 3.92% but exhibited extreme volatility, with a minimum value of -9.34%. This reflects the dynamics of regional economies that contracted due to external shocks (such as the pandemic) at the beginning of the observation period. Meanwhile, the variables of unemployment (Unplo) and regional expenditure (LnGE) show more stable data distributions, yet they still provide essential insights into the fiscal and labor variations necessary for the panel data regression analysis.

Model Selection and Diagnostic Tests

Prior to parameter estimation, a series of tests were conducted to determine the most efficient and consistent panel data model. The summary of these diagnostic tests is presented in Table 3.

Table 3. Model Selection and Classical Assumption Tests

Type of Test	Method	Statistic Value	P-Value	Conclusion
Model Selection	Hausman Test	19.300	0.0037	Fixed Effect (FE) Selected
Heteroskedasticity	Modified Wald	45368.41	0.000	Heteroskedasticity Present (Resolved via Robust)
Autocorrelation	Wooldridge	1.422	0.2419	No Autocorrelation

Source: Stata 17 Output (2026)

Based on the Hausman Test results, a statistic value of 19.30 was obtained with a p-value of 0.0037 ($p < 0.05$). This result dictates the rejection of the Null Hypothesis (H_0), thereby establishing the Fixed Effect Model (FEM) as a more appropriate framework than the Random Effect Model (REM). The FEM is considered more consistent in capturing the correlation between the error term and the independent variables that are province-specific. Subsequently, classical assumption tests were performed to ensure the validity of the estimation results. The Modified Wald Test for heteroskedasticity yielded a p-value of 0.000, indicating the presence of unequal residual variance across observations (heteroskedasticity). However, the Wooldridge test for autocorrelation produced a p-value of 0.2419 ($p > 0.05$), signifying that the model is free from first-order serial correlation issues. To address the identified heteroskedasticity, this study implemented the Robust Standard Error (vce robust) procedure. This approach ensures that the resulting statistical inferences remain reliable, unbiased, and consistent (BLUE) despite the presence of heteroskedasticity.

Hypothesis Testing and Estimation Results

The final estimation results using the Fixed Effect Model (FEM) with Robust Standard Errors are presented in Table 4. The model yields a Prob > F value of 0.0001, indicating that all independent variables simultaneously exert a significant effect on the poverty rate at a 99% confidence level.

Table 4. Final Estimation Results: Fixed Effect Robust Model

Variable	Coefficient (β)	Robust Std. Error	t- statistic	P-value	Significance
MSMEs Financing (LnMSMEs)	0.547	0.2656	2.060	0.048**	Significant
Total Financing (LnFin)	-2.6568	0.8606	-3.090	0.004***	Significant
Regional Expenditure (LnGE)	1.0897	0.5177	2.100	0.043**	Significant
Population (LnPop)	-12.1003	5.5028	-2.200	0.035**	Significant
Economic Growth (GRDP)	-0.028	0.0396	-0.710	0.484	Not Significant
Unemployment (Unplo)	-0.6521	0.4196	-1.550	0.130	Not Significant
Constant	125.1831	47.968	2.610	0.014	-
R-squared (Within)	0.3887				
F-test (Prob > F)	0.0001				
Total Observations	165				
Number of Groups	33				

Sig level ***1%, **5%, *10%

Source: Stata 17 Output (2026)

Based on the hypothesis testing in Table 4, the total Islamic financing variable (LnFin) is proven to have a highly significant negative effect on poverty levels in Indonesia. With a coefficient of -2.6568 and significance at the 1% level, these findings indicate that every 1% increase in total financing contributes to a direct reduction in the poverty rate by 2.65%. This result reinforces the argument that the intermediation function of Islamic banking, through its financing instruments, plays a vital role in wealth redistribution and regional economic strengthening, effectively reducing the number of poor residents at the provincial level.

Conversely, the primary variable of Islamic MSMEs financing (LnMSMEs) shows a positive and significant influence at the 5% level with a coefficient of 0.547. Although statistically moving in the same direction as the poverty rate, this phenomenon does not imply a failure of Islamic banking functions; rather, it reflects a pro-poor targeting characteristic of the disbursements. The penetration of Islamic MSMEs financing in Indonesia tends to be concentrated in regions with high poverty bases as part of a strategic

financial inclusion mission. This suggests that Islamic banks actively target vulnerable micro-sectors to provide capital access for those at the poverty line, aiming to improve their standard of living.

Regarding the control variables, this study finds that regional expenditure (LnGE) has a significant positive effect on poverty, signaling fiscal allocation inefficiencies in direct poverty alleviation programs at the regional level. In contrast, the population variable (LnPop) has a significant negative effect, indicating that population agglomeration at the provincial level creates economies of scale that help suppress poverty percentages through a larger market ecosystem. Meanwhile, economic growth (GRDP) and unemployment (Unplo) were found to have no statistically significant impact, suggesting that during the observation period, poverty was more influenced by financial accessibility and demographic factors rather than short-term macroeconomic fluctuations.

Discussion

Islamic Intermediation as an Instrument for Economic Redistribution

The finding that total Islamic banking financing (LnFin) exerts a significant negative impact on poverty reinforces the superiority of the Islamic banking system in upholding the principles of distributive justice. Theoretically, this confirms that Islamic finance possesses inherent advantages in terms of stability and equity due to its intrinsic link to the real sector through risk-sharing mechanisms (Rizvi et al., 2020; Rizvi & Arshad, 2018). This empirical evidence aligns with the Maqasid al-Shari'ah framework, specifically in the protection of wealth (*hifz al-mal*), which mandates that capital must not be confined to a narrow circle of the wealthy but must circulate to foster communal well-being (Anjum, 2022). Unlike the conventional system, which is often entangled in the phenomenon of financial lifting—where capital circulates predominantly within the financial sector—Islamic financing ensures that capital flows directly into productive regional activities. The 2.65% reduction in poverty for every 1% increase in financing proves that the expansion of Islamic banking across Indonesian provinces is effective in generating employment and strengthening the purchasing power of vulnerable populations through more inclusive schemes.

This research result aligns closely with the theory of financial development and poverty reduction popularized by Levine (2004), which posits that the development of financial institutions is a cornerstone of poverty alleviation by easing credit constraints. However, this study extends Levine's perspective by demonstrating that Islamic intermediation specifically mitigates the information asymmetry that often marginalizes the poor. In the Indonesian context, these findings support the studies of Durohman et al. (2025) and Dharmayanti et al. (2024) indicating that Islamic bank intermediation possesses a more direct transmission to social welfare compared to conventional banking. This is attributed to the unique characteristics of Islamic financing; for instance, *Murabahah* for productive asset procurement or *Mudharabah* can direct funds toward sectors capable of generating real value-added for grassroots communities, thereby effectively narrowing the income inequality gap.

The significant impact of total Islamic financing also signals that strengthening Islamic financial institutions at the provincial level is a vital strategy for regional governments. The effectiveness of this variable suggests that Islamic banking in Indonesia has successfully transitioned from a phase of quantitative growth to one of allocative efficiency, where the quality of fund distribution directly addresses regional poverty pockets. These findings reinforce the position that Sharia-based financial inclusion is not merely a complement to the national financial system but a primary instrument capable of addressing market failures in reaching underprivileged communities (Karlan et al., 2021). By integrating the principles of Islamic Social Finance with regional development theories, this study underscores that the synergy between bank financing and local economic empowerment programs is imperative to ensure that poverty reduction remains sustainable and resilient against future macroeconomic shocks.

The Inclusion Paradox: Understanding the Pro-Poor Nature of MSMEs Financing

The intriguing finding regarding the Islamic MSMEs financing variable (LnMSMEs), which exhibits a positive yet significant influence at the 5% level ($p < 0.05$), indicates a phenomenon of strategic targeted financing. Theoretically, this suggests that Islamic banking in Indonesia strategically directs MSMEs capital allocation toward provinces with large underprivileged populations. This positive coefficient reflects the empirical reality where Islamic financing penetration actually increases in regions characterized by high poverty rates. This phenomenon aligns with the Supply-Leading theory in financial inclusion, where financial institutions proactively expand into underserved markets to stimulate economic activity (Rahman et al., 2025). Within the framework of Islamic Economics, this reflects a moral responsibility to mitigate financial exclusion in regions deemed high-risk by conventional institutions, thereby fulfilling the Sharia mission of social justice.

The synchronous rise of MSMEs financing alongside poverty levels proves that MSMEs have transformed into a subsistence-driven safety net for micro-entrepreneurs living at the poverty line. From a microeconomic perspective, this instrument functions as a corrective mechanism for formal financial market failures, particularly in overcoming the adverse selection and moral hazard barriers that typically prevent the poor from accessing credit. From the perspective of Islamic Social Finance, such disbursements are not merely commercial activities but are part of an effort to stabilize consumption for the poor. This finding is supported by the argument of Budiman et al. (2023), who emphasizes that Islamic microfinancing is often utilized to maintain the survival of small businesses in poverty pockets. Consequently, this positive correlation is a reflection of social appetite—a banking intervention strategy that deliberately targets the appropriate mass base regardless of regional risk profiles.

Therefore, this positive coefficient should not be interpreted as a failure of intermediation in reducing poverty, but rather as tangible evidence that Islamic banking in Indonesia is intensively executing its dual objectives (commercial and social). The significance of this result demonstrates that the higher the poverty level in a province, the greater the responsiveness of Islamic banks in allocating their MSMEs resources to that region. This reinforces the position of Islamic banks as pro-poor institutions that are adaptive to the needs of underdeveloped areas, a finding that advances the discourse beyond the conventional finance-poverty linear model (Umam & Tama, 2026). Thus, the future challenge is no longer just capital disbursement, but improving the quality of business mentorship to ensure that precisely targeted financing can deliver long-term impacts in elevating the economic status of customers from impoverished to self-sufficient.

Evaluation of Fiscal Policy and Agglomeration Effects

The finding regarding the positive influence of regional expenditure (LnGE) on poverty rates provides a sharp critique of fiscal allocation effectiveness at the provincial level. This result indicates a significant allocative inefficiency in public spending, which remains dominated by routine or administrative expenditures of a consumptive nature, rather than capital expenditures that directly strengthen the economic structure of the poor. This phenomenon is theoretically consistent with the decentralization curse in public finance, where an increase in regional transfers, without robust institutional oversight, tends to escalate bureaucratic costs rather than public welfare (Afonso et al., 2024). Without proper governance, increased regional budgets may actually widen bureaucratic inefficiencies without providing a tangible trickle-down effect. This reinforces the notion that an increase in the quantity of regional budgets is not automatically linear with poverty reduction unless accompanied by a high quality of spending that is precisely targeted toward productive sectors (Uddin et al., 2026).

In contrast to fiscal effectiveness, the population variable (LnPop) significantly contributes to poverty reduction through the mechanism of agglomeration effects. Theoretically, this supports the view of Krugman (1991) in New Economic Geography, which posits that the concentration of residents in a region creates a more efficient economic ecosystem through specialization, labor pooling, and reduced transaction costs. Provinces with denser populations in Indonesia act as hubs of economic activity that lower the threshold for market entry for underprivileged communities (Andani et al., 2025). This agglomeration

functions as a natural catalyst that accelerates the circulation of goods and services, ultimately providing opportunities for underprivileged residents to engage in more stable and productive economic activities.

The findings of this study underscore a crucial policy position: in the effort to combat poverty in Indonesia, Sharia-based monetary transmission through banking intermediation has proven to be significantly more responsive and direct than regional fiscal policy. The inefficiencies found in the LnGE variable indicate that regional spending has not been optimally integrated with the needs of the real sector, which serves as the primary base for Islamic banking customers. Therefore, this study advocates for a fiscal-monetary synchronization model. Regional governments can no longer operate in isolation with conventional, consumptive social assistance schemes; instead, they must adopt empowerment models that move in tandem with access to Islamic financing (Xia & Zhang, 2025). The synergy between the natural efficiency of economic agglomeration and the targeted nature of Islamic financial intermediation offers a more robust formula for breaking the regional poverty cycle than a reliance on traditional, inefficient fiscal allocations.

4. CONCLUSION

This study successfully demonstrates that Islamic financial intermediation is not merely a financial instrument but a strategic pillar in regional poverty alleviation efforts in Indonesia. The primary findings indicate that total Islamic financing possesses significant effectiveness in reducing poverty levels through the expansion of profit-sharing-based credit, which fosters inclusive economic distribution. On the other hand, the phenomenon of the positive coefficient in Islamic MSMEs financing underscores the unique role of these institutions as pro-poor instruments that consistently penetrate regions with high underprivileged populations. This provides empirical evidence that Islamic banking in Indonesia is fulfilling dual objectives: maintaining profitability while simultaneously expanding financial inclusion for marginalized communities. The anomaly of regional expenditure inefficiency, contrasted with the positive impact of population agglomeration, sends a strong signal that interventions through the Islamic financial sector are currently far more responsive and precisely targeted in suppressing poverty rates compared to regional fiscal policies, which still require allocative reforms.

Based on these findings, this study recommends that the Financial Services Authority (OJK) and Bank Indonesia strengthen the incentive structures for Islamic banks willing to increase financing penetration in underdeveloped regions as part of bolstering the national economic safety net. For regional governments, synchronizing public expenditure budgets with the Islamic economic ecosystem is imperative to ensure productive and sustainable policy integration. Islamic banking institutions are also encouraged to go beyond capital disbursement by strengthening micro-business mentorship programs to ensure the economic escalation of underprivileged customers.

However, it is essential to acknowledge several limitations that bound the generalizability of these findings. First, the data scope is restricted to a five-year observation period (2020–2024), which primarily captures the dynamics of post-pandemic recovery and may not fully reflect long-term structural shifts in the Islamic financial landscape. Second, while the model employs Cluster-Robust Fixed Effects, potential endogeneity issues—particularly the bidirectional causality between financing growth and poverty levels—remain a challenge that warrants cautious interpretation.

Consequently, future research should aim to incorporate a longer time-series dataset to capture more comprehensive economic cycles. Furthermore, the use of alternative econometric approaches, such as the Generalized Method of Moments (GMM) techniques, is highly recommended to rigorously address potential endogeneity and establish clearer causal pathways. Finally, it is suggested to explore the role of Sharia digital financial inclusion and the integration of Islamic social funds, such as *zakat* and *wakaf*. The inclusion of these variables is expected to provide a more holistic perspective in mapping an Islamic economic ecosystem capable of comprehensively breaking the cycle of poverty in Indonesia.

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