



Integration of Islamic Finance-Based MSMEs: Microcredit Access and Sustainability of the Local Food Industry in Kampung Tahu Binjai

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ABSTRACT

This study aims to analyze the role of Islamic finance-based microcredit access in enhancing the sustainability of micro, small, and medium enterprises (MSMEs) in the local food industry of Kampung Tahu Binjai, with Islamic financial integration as a mediating variable. This research employs a quantitative approach using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method. Data were collected through questionnaires distributed to MSME actors using a purposive sampling technique. The results indicate that access to Islamic microcredit has a positive and significant effect on MSME sustainability. Furthermore, Islamic microcredit access is also found to significantly influence Islamic financial integration, suggesting that financing serves as an entry point for business actors to engage in the formal financial system. Islamic financial integration itself has a positive impact on MSME sustainability, emphasizing the importance of not only access to financing but also the optimal utilization of financial services. Moreover, the findings reveal that Islamic financial integration acts as a partial mediator in the relationship between Islamic microcredit access and MSME sustainability. Theoretically, this study contributes to the development of an integrative model linking financing access, financial integration, and MSME sustainability within the context of Islamic finance. Practically, these findings provide implications for policymakers and Islamic financial institutions to not only expand access to financing but also strengthen financial literacy and integration to support sustainable MSME development.

Keywords: MSMEs; Islamic Finance; Microcredit Access; Sustainability; Local Food Industry.

1. INTRODUCTION

The Indonesian government has positioned financial inclusion as a strategic instrument to strengthen micro, small, and medium enterprises (MSMEs) in achieving inclusive and sustainable economic growth. This commitment is reflected in various national policies, such as the National

Strategy for Financial Inclusion, as well as financial sector strengthening through recent regulations that emphasize expanding access to financing, promoting digital financial innovation, and reinforcing financial institutions, including the Islamic finance sector.

However, the implementation of these policies has not fully addressed

the real needs of MSME actors, particularly in the local food sector, which is still dominated by micro-scale businesses with limited access to formal financing sources.

The gap between Islamic financial literacy and inclusion in Indonesia remains a major challenge in MSME development. Islamic financial literacy has reached approximately 39%–43%, yet the inclusion rate remains relatively low at around 12%–13%. This condition indicates that public understanding of Islamic financial concepts and products has not been accompanied by their optimal utilization in economic activities. Furthermore, some individuals who already possess knowledge of Islamic finance have not yet implemented it in their business practices. This gap suggests the presence of structural barriers, including limited access to financial services, a lack of innovative financing products tailored to MSME characteristics, and weak integration between policy, literacy, and practical implementation.

Within the national economic context, MSMEs play a highly strategic role, particularly in the local food sector, which is a crucial component of food security and regional economic strengthening. MSMEs in the food sector not only contribute to the provision of basic necessities but also play a significant role in employment generation and the creation of locally based economic value. However, limited access to financing especially Islamic-based financing remains a key obstacle to improving production capacity, product innovation, and business sustainability. Many MSME actors still rely on personal capital or informal financing with high costs, which ultimately constrains their growth potential.

Previous studies have highlighted the importance of financial access in enhancing MSME performance and

sustainability. Beck et al. (2005) found that access to formal financial services is positively associated with the growth of small and medium enterprises. Demirgüç-Kunt et al. (2018) also emphasized that financial inclusion plays a crucial role in reducing economic inequality and improving societal welfare. In the context of Islamic finance, Abedifar et al. (2013) demonstrated that Islamic banking exhibits greater stability and a stronger orientation toward the real sector, thereby supporting sustainable MSME development.

The resilience of Islamic financial institutions to economic crises is another important factor in supporting sustainable MSME financing. Hasan and Dridi (2010) found that Islamic banks tend to be more stable than conventional banks during periods of economic stress. On the other hand, limited access to credit remains a major barrier to MSME growth in developing countries, as highlighted by Ayyagari et al. (2011). In the Indonesian context, Setiawan et al. (2022) revealed that financial literacy and access to financing significantly influence MSME performance, although the implementation of Islamic finance in the micro sector remains suboptimal.

The integration of financial aspects, innovation, and sustainability is a key factor in enhancing MSME competitiveness. Yusliza et al. (2020) showed that business sustainability is influenced not only by financial factors but also by innovation capabilities and the support of an inclusive financial system. However, most existing studies examine these variables separately, thus failing to provide a comprehensive understanding of the relationship between Islamic microcredit access, financial integration, and MSME sustainability within a unified and integrated framework.

The development of the Islamic



economy in Indonesia demonstrates significant potential; however, its utilization in the real sector particularly among MSMEs remains far from optimal. Although the contribution of the Islamic economy to the national economy is substantial, the low level of inclusion indicates that its benefits have not been evenly distributed among micro-enterprises. This condition underscores the need for a more integrative approach that connects financial literacy, access to financing, and the design of Islamic financial products tailored to MSME characteristics and needs.

Limited access to microcredit based on Islamic principles also affects the operational efficiency and innovation capacity of MSME actors. Without adequate financial support, businesses face difficulties in expanding operations, improving product quality, and adopting technologies that enhance

competitiveness. Therefore, the development of an Islamic financial integration model becomes essential as a solution to bridge the gap between financial inclusion policies and the actual needs of MSMEs in the local food sector.

Based on this background, this study aims to develop an Islamic finance-based MSME integration model through microcredit access to enhance the sustainability of the local food industry in Kampung Tahu Binjai. This research is expected to contribute theoretically to the development of literature on Islamic financial inclusion and MSME sustainability, as well as provide practical contributions in formulating more inclusive, adaptive, and sustainable policy strategies and financing designs.

2. LITERATURE REVIEW

2.1 Financial Inclusion Theory

Financial inclusion refers to the level of access, usage, and quality of formal financial services by individuals or business actors, particularly MSMEs. This concept is crucial, as limited access to finance remains one of the main barriers to the development of micro and small enterprises (Demirgüç-Kunt et al., 2022). Theoretically, financial inclusion consists of three main dimensions:

1. Access (availability of financial services)
2. Usage (utilization of financial services)
3. Quality (quality and suitability of services)

Financial inclusion plays a significant role in improving productivity, operational efficiency, and business resilience (Ozili, 2021).

Recent studies indicate that increased financial inclusion significantly contributes to MSME growth in developing countries (World Bank, 2022).

2.2 Islamic Financial Inclusion

Islamic financial inclusion is an extension of the financial inclusion concept based on Islamic principles, such as the prohibition of *riba* (interest), fairness, transparency, and profit-and-loss sharing. This system offers a more inclusive financing alternative for MSMEs that face limitations in collateral and access to formal financial institutions (Hassan et al., 2025). Islamic finance is characterized by:

1. Risk-sharing (profit-and-loss sharing)
2. Asset-based financing
3. Ethical and socially responsible finance



However, low levels of Islamic financial literacy and inclusion remain key challenges in its implementation (Demirgüç-Kunt et al., 2022). Indicators of Islamic financial integration can be measured through:

2.3 Microcredit Access Theory

Access to microcredit is a fundamental factor in supporting MSME growth and sustainability. According to financial intermediation theory, financial institutions act as intermediaries that channel funds from surplus units to deficit units for productive activities (Hair et al., 2022). Access to financing enables MSMEs to:

1. Expand business scale
2. Improve product quality
3. Enhance operational efficiency (World Bank, 2022)

In the context of Islamic finance, microcredit access offers advantages due to its emphasis on fairness and flexibility through profit-sharing mechanisms, making it more compatible with MSME characteristics (Hassan et al., 2025). Indicators of Islamic microcredit access include:

1. Ease of obtaining financing
2. Financing requirements
3. Speed of fund disbursement

2.5 Hypothesis Development

The Effect of Islamic Microcredit Access on MSME Sustainability

Theoretically, access to financing is a key element in financial intermediation theory, which explains that financial institutions function as intermediaries between surplus units and deficit units for productive activities. In the context of MSMEs, access to credit enables improvements in production capacity, operational

1. Use of Islamic financial products
2. Islamic financial literacy
3. Intensity of financial transactions
4. Engagement with Islamic financial institutions (Hassan et al., 2025; Setiawan et al., 2022)

4. Compatibility with Sharia-compliant schemes (Setiawan et al., 2022; Ozili, 2021)

2.4 MSME Sustainability

MSME sustainability refers to the ability of a business to survive and grow in the long term. This concept is explained through the Triple Bottom Line (TBL) approach, which includes:

1. Economic sustainability → business growth and profitability
2. Social sustainability → social contribution and employment
3. Environmental sustainability → resource efficiency (Yusliza et al., 2020)

Recent studies indicate that MSME sustainability is strongly influenced by access to financing, financial literacy, and innovation capabilities (Hasan et al., 2026). Indicators of MSME sustainability include:

1. Business growth
 2. Income stability
 3. Product innovation
 4. Business resilience (Setiawan et al., 2022; Hasan et al., 2026)
- efficiency, and business innovation.

Risk-sharing financing schemes such as *mudharabah* and *musyarakah* provide flexibility and reduce the burden of interest-based obligations, making them more suitable for MSMEs that face limitations in capital and collateral (Hassan et al., 2025). This is aligned with the concept of business sustainability within the Triple Bottom Line approach, which emphasizes the balance between economic, social, and long-term sustainability aspects.

Previous studies have shown that access to financing has a significant impact on MSME growth and sustainability (World Bank, 2022; Setiawan et al., 2022). Furthermore, Hasan et al. (2026) found that financial access contributes to improved performance and resilience of MSMEs in developing countries.

Based on the above discussion, the following hypothesis is proposed:

H1: Islamic microcredit access has a positive and significant effect on MSME sustainability.

The Effect of Islamic Microcredit Access on Islamic Financial Integration

In financial inclusion theory, access represents the initial dimension that determines the level of participation of individuals or business actors in the formal financial system. Access to financial services encourages the use of financial products and enhances financial literacy and engagement within the broader financial ecosystem (Demirgüç-Kunt et al., 2022).

Access to microcredit not only provides a source of capital but also serves as an entry point for MSME actors to recognize, understand, and utilize various Islamic financial products. This reflects the process of financial integration, which encompasses the dimensions of access, usage, and service quality.

Recent studies indicate that increased access to financial services, including microfinance and Islamic fintech, significantly enhances financial inclusion and integration (Ozili, 2021; Hassan et al., 2025). Therefore, the higher the level of Islamic microcredit access, the greater the level of Islamic financial integration among MSMEs.

H2: Islamic microcredit access has a positive and significant effect on Islamic financial integration.

The Effect of Islamic Financial Integration on MSME Sustainability

Islamic financial integration reflects the interconnectedness between literacy, access, and the use of Sharia-compliant financial services. In financial inclusion theory, strong integration enhances the ability of business actors to manage finances, optimize the use of financing, and improve operational efficiency.

From a sustainability perspective, financial integration supports more rational decision-making, enhances adaptability to market changes, and strengthens long-term business resilience. This is consistent with the Triple Bottom Line concept, which emphasizes the importance of balancing profitability, social responsibility, and sustainability.

Empirical studies show that financial literacy and the use of financial services significantly influence MSME performance and sustainability (Setiawan et al., 2022). Additionally, the development of digital finance and Islamic fintech further strengthens financial integration, which in turn enhances MSME competitiveness (Hassan et al., 2025).

H3: Islamic financial integration has a positive and significant effect on MSME sustainability.

The Mediating Role of Islamic Financial Integration

Although access to credit has a direct effect on MSME sustainability, its effectiveness becomes more optimal when supported by strong financial integration. Within the mediation framework, Islamic financial integration acts as a mechanism that explains how and why access to credit can enhance business sustainability.

Without adequate integration, access to financing tends to produce only short-term effects. In contrast, when MSME actors not only obtain financing but also understand, utilize, and become integrated into the financial system, the impact on business sustainability becomes stronger and more sustainable.

Recent studies show that financial



inclusion supported by financial literacy and system integration has a more significant impact on MSME performance compared to access alone (Ozili, 2021; Demirgüç-Kunt et al., 2022). Moreover, empirical studies indicate that mediating variables

such as financial literacy and the use of financial services strengthen the relationship between financing access and business performance (Nitzl et al., 2021).

H4: Islamic financial integration mediates the effect of Islamic microcredit access on MSME sustainability.

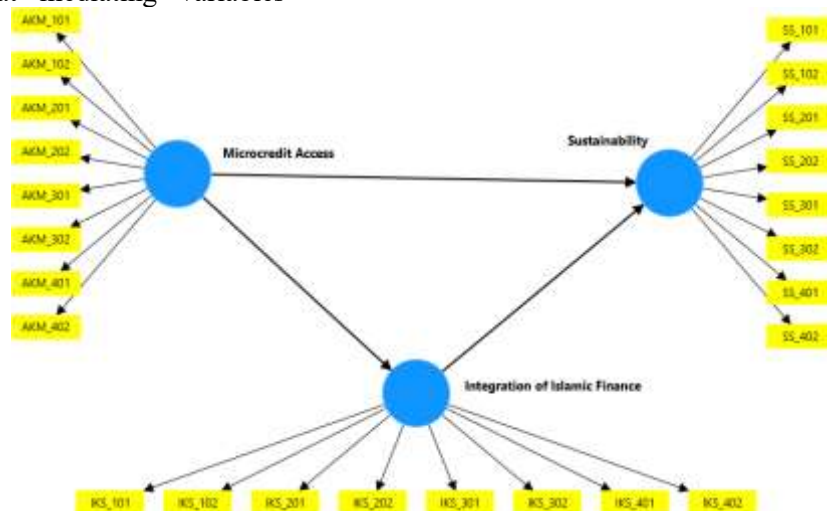


Figure 1. Conceptual Framework

3. RESEARCH METHOD

3.1 Research Procedure

This study aims to develop an Islamic finance-based MSME integration model through microcredit access to enhance the sustainability of the local food industry in Kampung Tahu Binjai. The research procedure involves identifying key variables, designing the research model, collecting data, and conducting empirical analysis to examine the relationships among Islamic microcredit access, Islamic financial integration, and MSME sustainability.

3.2 Sampling Technique

This study employs a purposive sampling method, which is a sampling technique based on specific considerations and criteria relevant to the research objectives. This method is chosen because not all MSME actors meet the

characteristics required for this study, particularly those operating in the local food industry and those who have accessed or have the potential to access Islamic microcredit financing.

The sample criteria in this study include:

1. MSME actors in the local food industry in Kampung Tahu Binjai,
2. MSMEs that have accessed or have the potential to access Islamic microcredit, and
3. MSMEs that are still actively operating.

Thus, purposive sampling is considered the most appropriate approach to obtain representative and relevant data regarding Islamic financial integration and business sustainability.

3.3 Data Collection Technique

This study utilizes both primary and secondary data. Primary data are collected through structured questionnaires distributed to MSME actors in the local food industry in Kampung Tahu Binjai as research respondents. In addition, field observations

and limited interviews are conducted to strengthen contextual understanding related to Islamic microcredit access practices and business sustainability.

Secondary data are collected through documentation studies, including reports from Islamic financial institutions, MSME data from relevant agencies, and related scientific literature. The data collection process begins with preliminary observations to identify research phenomena and gaps, which then serve as the basis for developing research instruments and conducting the survey.

3.4 Data Analysis Technique

This study employs the Structural Equation Modeling (SEM) approach using Partial Least Squares (PLS), operated through the SmartPLS application.

The SEM-PLS method is selected due to its ability to simultaneously analyze causal relationships among Islamic microcredit access, Islamic financial integration, and the sustainability of the local food industry.

Data analysis in developing the research model is conducted through

4. RESULTS AND DISCUSSION

4.1 Results

This study employs the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method using SmartPLS software to analyze the relationships among Islamic microcredit access, Islamic financial integration, and MSME sustainability.

the following stages:

1. **Validity and Reliability Testing**
Validity testing is conducted to ensure that each indicator accurately measures the research constructs, with criteria of factor loadings > 0.70 and indicator correlations > 0.30 . Reliability testing is performed using Cronbach's Alpha and Composite Reliability, with $\alpha > 0.60$ indicating that the instrument is reliable and consistent.
2. **Descriptive Statistics**
Descriptive statistical analysis is used to provide an overview of respondent characteristics and the distribution of responses related to Islamic microcredit access, Islamic financial integration, and MSME sustainability in the local food sector.
3. **Structural Equation Model (SEM) Analysis**
SEM analysis is conducted to examine causal relationships among variables in the research model, consisting of the following stages:
 - a. **Measurement Model (Outer Model):**
 - (1) Construct reliability and validity
 - (2) Discriminant validity
 - b. **Structural Model (Inner Model):**
 - (1) R-square values
 - (2) F-square values
 - (3) Hypothesis testing, including: direct effects, indirect effects, total effects.

4.1.1 Measurement Model Evaluation (Outer Model)

The evaluation of the measurement model is conducted to assess construct validity and reliability through convergent validity, discriminant validity, and reliability testing.

a. Convergent Validity

Convergent validity is assessed using outer loading values and Average Variance Extracted (AVE). An indicator is considered valid if it has a loading value greater than 0.70.

Table 1. Outer Loadings

Variable		Indicator	Loading
Islamic Microcredit Access		AKM_101	0.794
		AKM_102	0.761
		AKM_201	0.764



Variable		Indicator	Loading
Islamic Integration	Financial	AKM_202	0.837
		AKM_301	0.830
		AKM_302	0.829
		AKM_401	0.766
		AKM_402	0.756
	Financial	IKS_101	0.853
		IKS_102	0.824
		IKS_201	0.784
		IKS_202	0.801
		IKS_301	0.823
MSME Sustainability	Financial	IKS_302	0.859
		IKS_401	0.862
		IKS_402	0.850
	Financial	SS_101	0.791
		SS_102	0.795
		SS_201	0.775
		SS_202	0.767
		SS_301	0.795
		SS_302	0.731
		SS_401	0.737
		SS_402	0.775

All indicators have loading values above 0.70, thus meeting the criteria for convergent validity. This indicates that each indicator adequately represents its respective construct.

b. Reliability and AVE Test

Table 2. Construct Reliability and Validity

Variable		Cronbach's Alpha	Composite Reliability	AVE
Islamic Access	Microcredit	0.901	0.920	0.693
Islamic Integration	Financial	0.937	0.947	0.693
MSME Sustainability		0.887	0.910	0.558

All variables meet the following criteria:

1. Cronbach's Alpha > 0.70
2. Composite Reliability > 0.70
3. AVE > 0.50

Thus, all constructs are considered reliable and valid.

c. Discriminant Validity

Table 3. Fornell-Larcker Criterion

	Integration of Islamic Finance	Microcredit Access	Sustainability
Integration of Islamic Finance	0.832		
Microcredit Access	0.668	0.770	
Sustainability	0.664	0.585	0.747

The square root of AVE (diagonal values) is greater than the correlations between constructs, indicating that discriminant validity is achieved.

4.1.2 Structural Model Evaluation (Inner Model)

a. R-Square Values

Table 4. R-Square

Dependent Variable		R²	Category
Islamic Financial Integration		0.446	Moderate
MSME Sustainability		0.477	Moderate

explanatory power.

Islamic financial integration is explained by Islamic microcredit access by 44.6%. MSME sustainability is explained by the model by 47.7%, indicating that the model has moderate

b. Effect Size (f²)

Table 5. Effect Size

Relationship	f²	Category
Microcredit Access → Islamic Financial Integration	0.805	Large
Microcredit Access → MSME Sustainability	0.069	Small
Islamic Financial Integration → MSME Sustainability	0.257	Medium–Large

Islamic microcredit access has a strong effect on Islamic financial integration and a moderate effect on MSME sustainability.

4.1.3 Hypothesis Testing

Table 6. Path Coefficients

Hypothesis	Relationship	Coefficient (β)	T-Statistic	P-Value	Decision
H1	Microcredit Access → Sustainability	0.256	2.487	0.013	Accepted
H2	Microcredit Access → Integration of Islamic Finance	0.668	10.503	0.000	Accepted
H3	Integration of Islamic Finance → Sustainability	0.493	4.653	0.000	Accepted

All relationships show T-statistics > 1.96 and



P-values < 0.05, indicating that all hypotheses are supported.

4.1.4 Mediation Test

Table 7. Indirect Effect

Hypothesis	Relationship	Coefficient	T-Statistic	P-Value	Remark
H4	Microcredit Access → Islamic Financial Integration → Sustainability	0.329	4.173	0.000	Significant Mediation

Islamic financial integration is proven to mediate the relationship between Islamic microcredit access

and MSME sustainability. The type of mediation is partial mediation, as the direct effect remains significant.

4.1. Discussion

4.2.1 The Role of Islamic Microcredit Access on MSME Sustainability

The results of this study indicate that Islamic microcredit access has a positive and significant effect on MSME sustainability. This finding reinforces financial intermediation theory, which posits that access to financing is a key factor in promoting productive economic activities. In the context of Islamic finance, profit-sharing mechanisms provide greater flexibility and reduce the financial burden on business actors compared to interest-based systems (Hassan et al., 2025).

Empirically, these results are consistent with the findings of the World Bank (2022) and Hasan et al. (2026), which confirm that financial access significantly contributes to improving MSME performance and resilience. However, this study offers an additional contribution by demonstrating that this effect is particularly relevant in community-based MSMEs, such as the local food industry in Kampung Tahu Binjai, which largely relies on informal financing.

Furthermore, these findings suggest that Islamic microcredit access functions not only as a source of capital but also as an economic empowerment instrument that enhances production capacity, operational efficiency, and long-term business sustainability.

4.2.2 Islamic Microcredit Access as a Driver of Financial Integration

This study finds that Islamic microcredit access has a significant effect on Islamic financial integration. This finding supports financial inclusion theory, which states that access is the initial stage in encouraging the use of and participation in the formal financial system (Demirgüç-Kunt et al., 2022).

When MSME actors gain access to financing, they not only obtain capital but are also encouraged to utilize other financial services, improve financial literacy, and strengthen their relationships with financial institutions. Thus, access to credit serves as an entry point in the process of financial integration.

This finding is consistent with Ozili (2021), who argues that increased financial access promotes greater use of financial services and expands financial inclusion. In the context of Islamic finance, this integration becomes even more critical as it involves values, trust, and compliance with Sharia principles.

4.2.3 Islamic Financial Integration and MSME Sustainability

The results indicate that Islamic financial integration has a positive and significant effect on MSME sustainability. This suggests that business sustainability is determined not only by the availability of capital but also by the level of engagement of business actors within the financial system as a whole.

Financial integration encompasses financial literacy, access, and the use of financial services. These three dimensions contribute to improving MSMEs' ability to

manage finances, make more rational business decisions, and adapt to changes in the business environment.

These findings are consistent with Setiawan et al. (2022), who found that financial literacy and access to financing significantly influence MSME performance. Additionally, Hassan et al. (2025) emphasize that Islamic financial integration, including the utilization of digital financial innovations, plays a crucial role in enhancing efficiency and business sustainability.

Therefore, this study extends the existing literature by demonstrating that Islamic financial integration is a strategic factor in fostering sustainability among MSMEs in the real sector.

4.2.4 The Mediating Role of Islamic Financial Integration

One of the key findings of this study is the role of Islamic financial integration as a mediating variable in the relationship between Islamic microcredit access and MSME sustainability. This indicates that access to financing alone is not sufficient to ensure optimal business sustainability.

From a mediation theory perspective, financial integration serves as a mechanism that explains how access to financing can generate more sustainable impacts. Without adequate integration, credit access tends to produce only short-term effects.

These findings are consistent with Ozili (2021) and Demirgüç-Kunt et al. (2022), who emphasize that the effectiveness of financial inclusion depends heavily on the integration of access, literacy, and the use of financial services. Furthermore, Nitzl et al. (2021) highlight that mediating variables play a crucial role in strengthening relationships among variables in structural models.

Thus, Islamic financial integration can be regarded as a key factor in optimizing the benefits of microfinance in enhancing MSME sustainability.

5. CONCLUSION

This study aims to analyze the effect of Islamic finance-based microcredit access on the sustainability of MSMEs in the local food industry of Kampung Tahu Binjai, with Islamic financial integration as a mediating variable.

The findings reveal that Islamic microcredit access has a positive and significant effect on MSME sustainability. This indicates that Sharia-based financing not only functions as a source of capital but also as a crucial factor in enhancing business resilience and long-term sustainability.

Furthermore, Islamic microcredit access is found to have a significant effect on Islamic financial integration, suggesting that financing serves as an entry point for MSME actors to become more actively engaged in the formal financial system. Islamic financial integration also has a positive impact on MSME sustainability, emphasizing the importance of not only access to financing but also the optimal utilization of financial services.

Moreover, this study finds that Islamic financial integration acts as a partial mediator in the relationship between Islamic microcredit access and MSME sustainability. This finding indicates that the impact of financing becomes more optimal when supported by a higher level of financial integration.

Theoretically, this study contributes to the development of an integrative model that links financing access, financial integration, and MSME sustainability within the context of Islamic finance. Practically, the findings imply that Islamic financial institutions and policymakers need to not only expand access to financing but also enhance financial literacy and integration among MSME actors.

However, this study has limitations, particularly its focus on a single location and the use of cross-sectional data. Therefore, future research is recommended to expand the study area, incorporate additional variables such as digitalization and innovation, and apply a longitudinal approach to achieve a more comprehensive



understanding.

Acknowledgements: This research was funded by the Ministry of Higher Education, Science, and Technology through the BIMA Research Grant under the Beginner Basic Research Scheme for Fiscal Year 2026. The authors express their sincere gratitude for the financial support that made this study possible.

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