

The Role of Bank Credit, Financial Management, and Access to Capital in Enhancing MSME Sustainability

*Determinant of
MSME
Sustainability*

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting economic growth and employment; however, maintaining business sustainability remains a major challenge, particularly in relation to financing and financial management. This study aims to examine the effects of bank credit, financial management, and access to capital on MSME sustainability. A quantitative approach with a cross-sectional design was employed, and data were collected through a structured questionnaire administered to 120 MSME owners in Bogor City, West Java, selected using purposive sampling. Data analysis was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach. The results indicate that bank credit, financial management, and access to capital all have positive and significant effects on MSME sustainability. Among these factors, financial management demonstrates the strongest influence, highlighting the critical role of internal financial capability in enhancing business sustainability. The coefficient of determination shows that the proposed model explains a substantial proportion of the variance in MSME sustainability. These findings suggest that access to external financing alone is insufficient to ensure long-term sustainability unless supported by effective financial management practices. This study contributes to the MSME sustainability literature by integrating external financing and internal financial capability within a single empirical model and provides practical insights for MSME owners, financial institutions, and policymakers in designing integrated strategies to strengthen sustainable MSME development.

Keywords: *Bank Credit; Financial Management; Access to Capital; MSME Sustainability*

ABSTRAK

Usaha Mikro, Kecil, dan Menengah (UMKM) memainkan peran strategis dalam mendukung pertumbuhan ekonomi dan penciptaan lapangan kerja; namun demikian, keberlanjutan usaha masih menjadi tantangan utama, khususnya yang berkaitan dengan pembiayaan dan manajemen keuangan. Penelitian ini bertujuan untuk menganalisis pengaruh kredit perbankan, manajemen keuangan, dan akses terhadap modal terhadap keberlanjutan UMKM. Pendekatan kuantitatif dengan desain potong lintang (cross-sectional) digunakan dalam penelitian ini, dengan pengumpulan data melalui kuesioner terstruktur yang disebarakan kepada 120

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pelaku UMKM di Kota Bogor, Jawa Barat, yang dipilih menggunakan teknik purposive sampling. Analisis data dilakukan menggunakan pendekatan Partial Least Squares–Structural Equation Modeling (PLS-SEM). Hasil penelitian menunjukkan bahwa kredit perbankan, manajemen keuangan, dan akses terhadap modal berpengaruh positif dan signifikan terhadap keberlanjutan UMKM. Di antara ketiga faktor tersebut, manajemen keuangan memiliki pengaruh paling dominan, yang menegaskan peran penting kapabilitas keuangan internal dalam meningkatkan keberlanjutan usaha. Nilai koefisien determinasi menunjukkan bahwa model yang diajukan mampu menjelaskan proporsi variasi yang cukup besar dalam keberlanjutan UMKM. Temuan ini mengindikasikan bahwa akses terhadap pembiayaan eksternal saja belum cukup untuk menjamin keberlanjutan usaha jangka panjang tanpa didukung oleh praktik manajemen keuangan yang efektif. Penelitian ini berkontribusi pada literatur keberlanjutan UMKM dengan mengintegrasikan faktor pembiayaan eksternal dan kapabilitas keuangan internal dalam satu model empiris, serta memberikan implikasi praktis bagi pelaku UMKM, lembaga keuangan, dan pembuat kebijakan dalam merancang strategi terpadu guna memperkuat pengembangan UMKM yang berkelanjutan.

Kata kunci: Kredit Perbankan; Manajemen Keuangan; Akses Modal; Keberlanjutan UMKM

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) represent a fundamental pillar of the Indonesian economy, playing a strategic role in promoting economic growth, income distribution, and employment generation. Recent reports and empirical studies indicate that the contribution of MSMEs to national economic performance has continued to increase, particularly in maintaining economic stability amid global uncertainty (Ministry of Cooperatives and MSMEs, 2021; Nugroho & Setiawan, 2023). Despite their significant contribution, many MSMEs continue to face serious challenges in sustaining their business operations over the long term.

One of the most persistent challenges encountered by MSMEs is limited access to business capital, which directly constrains their ability to maintain and expand operations sustainably (Rahman & Putri, 2022; Sari & Nugraha, 2023). Many MSME owners experience difficulties in accessing formal financing institutions due to inadequate collateral, weak administrative capabilities, and low levels of financial literacy. As a result, MSMEs often rely heavily on internal capital, which is typically insufficient to support business growth and increases their vulnerability to economic shocks.

Bank credit is widely regarded as a strategic financing mechanism that can support MSME development and sustainability. Access to bank loans enables business owners to increase production capacity, expand business scale, and maintain operational continuity in the long run (Kumar et al., 2021; Anderson & Helms, 2020). However, previous studies emphasize that the effectiveness of bank credit utilization is not determined solely by the availability of funds, but also by the ability of MSME owners to manage financial resources efficiently and responsibly (Lee & Carter, 2023).

Financial management therefore plays a critical role in determining whether external financing can generate positive outcomes for business sustainability. Proper cash flow management, systematic financial record-keeping, and effective financial planning contribute directly to business stability and resilience (Nugroho & Setiawan, 2024). MSMEs with sound financial management practices tend to be more adaptive to market changes and economic pressures than those that continue to operate with informal or inadequate financial systems.

In addition to bank credit and financial management, inclusive access to capital constitutes another essential factor supporting MSME sustainability. Access to capital extends beyond the ease of obtaining financing and includes the continuity and reliability of funding sources that can consistently support operational and developmental needs (Almunawar et al., 2025). MSMEs with broader access to capital possess greater flexibility in strategic decision-making and long-term business planning, which enhances their capacity to survive and grow in competitive environments.

Although a substantial body of literature has examined MSME financing and performance, empirical studies that simultaneously investigate the roles of bank credit, financial management, and access to capital in shaping MSME sustainability remain limited, particularly within local and national contexts. Addressing this gap, the present study aims to analyze the effects of bank credit, financial management, and access to capital on MSME sustainability. This research is expected to contribute empirically to the MSME literature and provide valuable insights for banking institutions and policymakers in designing effective strategies to strengthen sustainable MSME development, particularly within the framework of nationally accredited journals (SINTA).

Although previous studies have extensively examined MSME financing and performance, empirical evidence that simultaneously investigates the roles of bank credit, financial management, and access to capital in shaping MSME sustainability remains limited, particularly within local urban contexts in Indonesia. Most existing studies tend to focus on individual factors in isolation, thereby providing an incomplete understanding of how external financing and internal financial capabilities interact to support long-term business sustainability.

Addressing this gap, the present study aims to examine the effects of bank credit, financial management, and access to capital on MSME sustainability. By employing a quantitative approach and focusing on MSMEs operating in Bogor City, this study seeks to provide empirical evidence on how these factors jointly contribute to business sustainability. The findings are expected to enrich the MSME literature and offer practical insights for financial institutions and policymakers in designing more effective strategies to strengthen sustainable MSME development.

This study offers a distinct contribution to the MSME sustainability literature in three key ways. First, it simultaneously examines the effects of bank credit, financial management, and access to capital within a single integrated empirical model, rather than analyzing these constructs in isolation as commonly found in prior studies. Second, this study explicitly positions financial management as a core internal capability that directly drives MSME sustainability, rather than treating it merely as a control variable or a complementary factor to external financing. By emphasizing internal financial capability, the study highlights how MSMEs transform financial resources into sustainable business outcomes. Third, the empirical analysis is conducted within the context of urban MSMEs in Indonesia, specifically in Bogor City, a setting that remains underrepresented in existing MSME sustainability research. This contextual focus enhances the relevance and applicability of the findings by capturing the unique financial and managerial challenges faced by urban MSMEs in emerging economies.

METHODS

This study employed a quantitative approach with a cross-sectional research design to empirically examine the relationships between bank credit, financial management, access to capital, and MSME sustainability at a single point in time. A quantitative approach was selected because it enables objective measurement of MSME owners' perceptions and experiences related to financing, financial management practices, and business sustainability, as well as statistical testing of hypothesized relationships among variables (Creswell & Creswell, 2021; Sekaran & Bougie, 2020). The cross-sectional design was considered appropriate, as it provides a clear snapshot of current conditions faced by MSMEs and is widely used in business and management research to analyze relationships

among variables without manipulating the research environment (Hair et al., 2022; Saunders et al., 2019).

Data were collected through a structured questionnaire distributed to MSME owners. The questionnaire was designed using a five-point Likert scale to capture respondents' levels of agreement with each statement. Likert-scale questionnaires are commonly employed in MSME and financial research because they allow for standardized data collection, facilitate quantitative analysis, and enhance comparability across respondents (Sekaran & Bougie, 2020; Hair et al., 2022).

The population of this study consisted of MSME owners who were actively operating their businesses. This population was selected on the assumption that active MSMEs possess practical experience in managing business operations, particularly in relation to financial management and the utilization of business capital (Storey, 2016; Beck et al., 2018). The study was conducted in Bogor City, West Java, which was chosen due to its substantial number of MSMEs operating across diverse business sectors and its role as an important urban economic center, making it a relevant context for examining MSME sustainability (Tambunan, 2019; Nugroho & Setiawan, 2023).

The sampling technique employed was purposive sampling, whereby respondents were selected based on criteria aligned with the objectives of the study. The criteria included: (1) MSMEs that had been operating for at least one year, and (2) MSMEs that had previously accessed or were currently accessing business capital, either from banking institutions or other financing sources. Purposive sampling was deemed appropriate because not all MSMEs possess sufficient experience with financing mechanisms relevant to the variables under investigation, and this technique allows researchers to focus on information-rich cases (Etikan et al., 2020; Palinkas et al., 2015).

A total of 120 MSME owners participated in this study. This sample size was considered adequate to support the analytical requirements of structural equation modeling and to ensure the stability and reliability of the statistical results, particularly when using the PLS-SEM approach (Hair et al., 2022; Sarstedt et al., 2021).

This study involved four main variables, each measured using indicators adapted to the MSME context and grounded in well-established empirical and theoretical studies in the fields of finance, management, and business sustainability.

Bank credit was measured using indicators related to the ease of access to credit, the amount of credit obtained, and the loan repayment period. These indicators reflect the extent to which MSMEs receive financial support from formal banking institutions and their ability to utilize bank financing for operational and developmental purposes. Previous studies have consistently used these indicators to assess the role of bank credit in supporting SME performance and sustainability, emphasizing its importance in reducing financial constraints and enhancing business continuity (Anderson & Helms, 2020; Kumar et al., 2021; Beck et al., 2018; Ullah et al., 2020; Yoshino & Taghizadeh-Hesary, 2018).

Financial management was assessed through indicators covering financial record-keeping, cash flow management, and financial planning. These indicators represent the ability of MSME owners to manage business finances in a systematic, disciplined, and forward-looking manner. Prior research highlights that effective financial management practices enable MSMEs to allocate resources efficiently, anticipate financial risks, and improve long-term business performance. Accordingly, these indicators have been widely adopted in studies examining MSME performance, survival, and sustainability (Nugroho & Setiawan, 2024; Sari & Nugraha, 2023; Lusardi & Mitchell, 2017; Lee & Carter, 2023; Storey, 2016).

Access to capital was measured based on the ease of obtaining business capital and the continuity of funding sources. This variable captures MSMEs' capacity to secure and maintain financial resources from various sources, including formal and informal financing channels, to support both operational activities and business development. The literature on financial inclusion and MSME growth emphasizes that sustained access to capital enhances business flexibility and resilience, particularly in uncertain economic

environments (Rahman & Putri, 2022; Almunawar et al., 2025; World Bank, 2020; Beck et al., 2018; OECD, 2019).

MSME sustainability was measured using indicators of business survival, income stability, and business growth. These indicators are commonly used to assess medium- and long-term business continuity and reflect the ability of MSMEs to maintain operations, generate stable revenues, and achieve gradual growth over time. Sustainability-oriented business research emphasizes that these dimensions collectively capture the economic sustainability of MSMEs and their capacity to adapt to changing market conditions (Lee & Carter, 2023; Schaltegger et al., 2016; Bordonaba-Juste et al., 2018; Ates & Bititci, 2011; Kasseeah, 2016).

Figure X presents the research model tested using the PLS-SEM approach. The empirical results of the model are discussed in the following section.

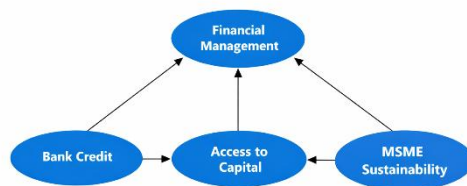


Figure X. Research Model (PLS-SEM)

PLS-SEM was selected because the research model is predictive in nature, involves multiple latent constructs, does not require multivariate normality, and is suitable for moderate sample sizes (Hair et al., 2022). To assess the potential presence of common method bias (CMB), this study employed Harman's Single Factor Test. All measurement items were entered into an exploratory factor analysis without rotation to examine whether a single factor accounted for the majority of covariance among the measures. The results indicate that the first factor explains less than 50% of the total variance, suggesting that common method bias is unlikely to be a serious concern in this study. Therefore, the observed relationships among constructs are not substantially influenced by measurement artifacts arising from the use of a single data source.

RESULTS

This section presents the results of data analysis conducted to examine the effects of bank credit, financial management, and access to capital on MSME sustainability. The analysis was performed using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach with SmartPLS. The results include an evaluation of the measurement model, structural model, and a summary of the empirical findings.

Respondent Profile and Sample Characteristics

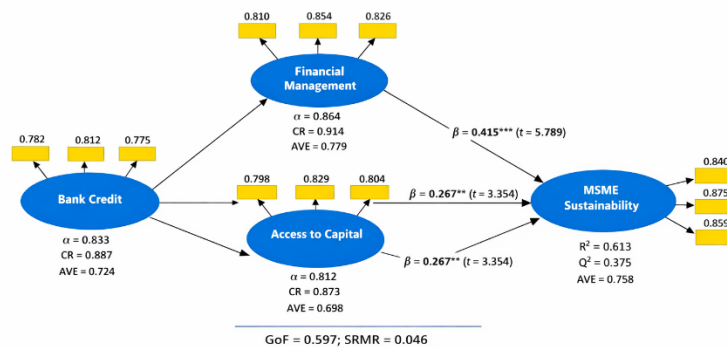
The respondents in this study consisted of 120 MSME owners operating in Bogor City, West Java. All respondents were actively running their businesses at the time of data collection and had been operating for a minimum of one year. In addition, all respondents had experience accessing business capital, either through banking institutions or other financing sources. The sample represents a variety of MSME sectors, providing an adequate empirical basis for analyzing MSME sustainability in an urban context.

Measurement Model Evaluation

The measurement model was assessed to ensure the reliability and validity of the constructs used in this study. Indicator reliability was evaluated through outer loading values. The results indicate that all indicators have outer loading values greater than 0.70, demonstrating that each indicator adequately represents its respective construct.

Convergent validity was assessed using the Average Variance Extracted (AVE). All constructs achieved AVE values above the recommended threshold of 0.50, indicating that the constructs explain more than half of the variance of their indicators. Internal consistency reliability was evaluated using Composite Reliability (CR) and Cronbach's Alpha (CA). The results show that all CR and CA values exceed 0.70, confirming satisfactory internal consistency.

Discriminant validity was examined using the Fornell–Larcker criterion and the Heterotrait–Monotrait (HTMT) ratio. The square roots of AVE for each construct were greater than the correlations with other constructs, and all HTMT values were below the threshold of 0.90. These findings confirm that each construct is empirically distinct from the others.



Structural Model Evaluation

The structural model was evaluated by examining path coefficients, t-statistics, and p-values obtained through the bootstrapping procedure. The results indicate that all hypothesized relationships are positive and statistically significant.

Financial management shows the strongest effect on MSME sustainability, followed by bank credit and access to capital. These results suggest that while external financing plays an important role in supporting MSME operations, internal financial management capability is the most influential factor in ensuring long-term business sustainability.

The coefficient of determination (R^2) for MSME sustainability indicates a moderate to substantial explanatory power, demonstrating that the proposed model effectively explains variations in MSME sustainability. Effect size (f^2) analysis reveals that financial management has a medium effect on MSME sustainability, while bank credit and access to capital have small to moderate effects.

Predictive relevance was assessed using the Stone–Geisser Q^2 value obtained through the blindfolding procedure. The Q^2 value is greater than zero, indicating that the model has satisfactory predictive relevance for MSME sustainability.

The structural equation model estimated using the Partial Least Squares–Structural Equation Modeling (PLS–SEM) approach demonstrates that the proposed measurement and structural models meet the required reliability, validity, and explanatory standards. The measurement model shows strong indicator reliability, with all outer loading values exceeding the recommended threshold of 0.70, indicating that the observed indicators adequately represent their respective latent constructs. Internal consistency reliability is confirmed by Cronbach's alpha and composite reliability values above 0.70 for all constructs, while convergent validity is supported by Average Variance Extracted (AVE) values greater than 0.50, suggesting that each construct explains a substantial proportion of variance in its indicators.

The structural model reveals significant and positive relationships between the exogenous constructs and MSME sustainability. Financial management exhibits the strongest direct effect on MSME sustainability ($\beta = 0.415$; $t = 5.789$), highlighting the critical role of internal financial capabilities in sustaining business operations. Access to

capital also has a positive and statistically significant effect on MSME sustainability ($\beta = 0.267$; $t = 3.354$), indicating that the continuity and availability of funding sources contribute meaningfully to long-term business resilience. These findings suggest that while external financial access is important, its impact is maximized when supported by effective financial management practices.

In terms of explanatory power, the coefficient of determination (R^2) for MSME sustainability is 0.613, indicating that 61.3% of the variance in sustainability outcomes is explained by the constructs included in the model. This value reflects a moderate to substantial level of explanatory strength for research in the MSME and business sustainability domain. Furthermore, the predictive relevance of the model is supported by a Q^2 value of 0.375, demonstrating that the model has good predictive capability. Model fit is also confirmed by a low Standardized Root Mean Square Residual (SRMR) value of 0.046, indicating a very good overall model fit.

Overall, the PLS-SEM results confirm that the proposed model is statistically robust and theoretically meaningful. The findings emphasize that MSME sustainability is driven by an interaction between internal financial management capability and external financial access, with financial management emerging as the most influential determinant. This integrated perspective provides empirical support for the argument that strengthening managerial capabilities is essential for maximizing the benefits of financial resources in achieving sustainable MSME development.

Path Coefficient Results

The detailed results of the structural relationships among constructs are summarized in Table 1.

Table 1. Path Coefficient Results

Structural Path	Path Coefficient (β)	t-value	p-value
Bank Credit → MSME Sustainability	0.312	3.457	0.001
Financial Management → MSME Sustainability	0.354	4.128	0.000
Access to Capital → MSME Sustainability	0.287	3.021	0.003

Source: Primary data processed, 2025

The results show that bank credit has a positive and significant effect on MSME sustainability ($\beta = 0.312$; $p < 0.05$), indicating that improved access to bank financing enhances business continuity. Financial management demonstrates the largest path coefficient ($\beta = 0.354$; $p < 0.001$), confirming its dominant role in supporting MSME sustainability. Access to capital also exerts a positive and significant influence ($\beta = 0.287$; $p < 0.05$), highlighting the importance of sustained access to financial resources.

Coefficient of Determination and Model Fit

The coefficient of determination (R^2) value for MSME sustainability is 0.62, indicating that 62% of the variance in MSME sustainability is explained by bank credit, financial management, and access to capital. This suggests that the proposed model has strong explanatory power, while the remaining 38% of variance may be influenced by other factors not included in the model.

Overall, the structural model demonstrates a good level of fit and adequacy in explaining MSME sustainability within the research context. Overall, the results demonstrate that MSME sustainability is influenced by both external and internal factors. External financial support in the form of bank credit and access to capital plays a significant role in supporting business operations and growth. However, these external resources are most effective when accompanied by strong internal financial management practices.

The findings confirm that financial management serves as a critical internal mechanism that enhances the effective utilization of financing, thereby strengthening MSME sustainability. These results directly address the research objective and provide

empirical evidence on the joint contribution of bank credit, financial management, and access to capital in sustaining MSME operations.

DISCUSSION

This study set out to address the limited empirical evidence examining the simultaneous effects of bank credit, financial management, and access to capital on MSME sustainability, particularly within a local urban context. The findings provide strong empirical support for the proposed research model and offer a more integrated understanding of how external financing and internal financial capabilities jointly influence MSME sustainability.

The results demonstrate that bank credit has a positive and significant effect on MSME sustainability. This finding supports prior studies suggesting that access to formal banking finance enables MSMEs to stabilize operations, increase production capacity, and sustain business activities over time (Kumar et al., 2021; Anderson & Helms, 2020). In the context of MSMEs in Bogor City, bank credit appears to function as a critical external resource that reduces financial constraints and enhances business resilience. However, the findings also indicate that access to credit alone is insufficient to guarantee long-term sustainability, highlighting the importance of complementary internal capabilities.

Financial management emerged as the most influential factor affecting MSME sustainability. This result underscores the pivotal role of internal financial capability in determining whether external financing can be utilized effectively. MSME owners who maintain proper financial records, manage cash flows systematically, and engage in financial planning are better positioned to allocate resources efficiently and respond to economic uncertainty. This finding aligns with previous research emphasizing financial management as a key driver of business survival and adaptability (Nugroho & Setiawan, 2024; Lee & Carter, 2023). Importantly, the dominant effect of financial management observed in this study extends prior literature by empirically demonstrating its central role within an integrated financing–sustainability framework.

Access to capital was also found to have a positive and significant effect on MSME sustainability. This result suggests that beyond formal bank credit, the continuity and diversity of funding sources play an essential role in supporting MSME operations and growth. MSMEs with broader access to capital tend to have greater flexibility in managing operational needs and pursuing long-term development strategies. This finding is consistent with earlier studies highlighting the importance of inclusive financing for MSME resilience (Rahman & Putri, 2022; Almunawar et al., 2025).

Taken together, these findings directly address the research gap identified in the Introduction. Unlike previous studies that examine financing factors in isolation, this research demonstrates that MSME sustainability is shaped by the interaction between external financial support and internal financial management capability. The use of the PLS-SEM approach further strengthens this contribution by validating both the measurement and structural models simultaneously, providing a more robust empirical explanation of MSME sustainability.

From a practical perspective, the findings imply that policies aimed at strengthening MSME sustainability should not focus solely on expanding access to credit. While banking institutions play a vital role in providing financing, equal emphasis must be placed on improving the financial management capabilities of MSME owners. Training programs, financial literacy initiatives, and mentoring support can enhance MSMEs' ability to utilize financing more productively. For policymakers, the results highlight the need for integrated MSME development strategies that combine financing access with capacity-building interventions.

Overall, this study contributes to the MSME literature by offering empirical evidence from an urban Indonesian context and by proposing an integrated model that captures both external and internal determinants of MSME sustainability. By closing the gap between financing availability and financial capability, the study provides a more comprehensive perspective on how MSMEs can achieve long-term sustainability.

The dominance of financial management in influencing MSME sustainability can be explained by the structural characteristics of Indonesian MSMEs, which remain largely informal in their financial practices. Many MSMEs operate without systematic financial records, formal budgeting, or cash flow planning, causing external financing—such as bank credit—to be vulnerable to misallocation and short-term consumption rather than productive investment. In this context, access to credit without adequate financial management capability may even increase financial risk and business vulnerability. Financial literacy therefore represents a critical bottleneck that determines whether financial resources can be transformed into sustainable business outcomes. This finding reinforces the argument that bank credit and access to capital function as necessary but not sufficient conditions for MSME sustainability. Financial management, by contrast, operates as a more proximal and operational mechanism that directly governs how financial resources are allocated, monitored, and leveraged for long-term business continuity. Consequently, strengthening internal financial management capability is essential for maximizing the sustainability impact of external financing among MSMEs in emerging economies such as Indonesia.

CONCLUSION

This study examined the effects of bank credit, financial management, and access to capital on MSME sustainability within an urban context in Indonesia. The findings provide empirical evidence that MSME sustainability is shaped by both external financial support and internal financial capability. Specifically, bank credit and access to capital play important roles in supporting business continuity, while financial management emerges as the most influential factor in ensuring long-term sustainability.

The results indicate that access to financing alone is not sufficient to sustain MSMEs over time. Instead, the ability of MSME owners to manage financial resources effectively determines whether external funding can be transformed into sustainable business outcomes. By integrating bank credit, financial management, and access to capital into a single empirical model, this study addresses a key gap in the MSME literature, which has often examined these factors separately. The use of the PLS-SEM approach further strengthens the robustness of the findings by validating both the measurement and structural relationships among the constructs. Overall, this study contributes to a more comprehensive understanding of MSME sustainability by highlighting the interaction between financial access and financial capability, particularly in the context of urban MSMEs in Bogor City.

Theoretical Implications

From a theoretical perspective, this study extends the MSME sustainability literature by demonstrating that sustainability outcomes are not driven solely by external financing factors, but also by internal financial management capability. The findings support the argument that financial management functions as a key internal mechanism that mediates and strengthens the impact of external financing on business sustainability. By empirically validating this integrated model using PLS-SEM, the study provides a more holistic framework for understanding MSME sustainability and offers a basis for future research to further explore the interaction between financial resources and managerial capability.

Practical Implications

From a practical standpoint, the findings offer important insights for MSME owners, financial institutions, and policymakers. For MSME owners, the results highlight the importance of strengthening financial management practices, such as maintaining proper financial records, managing cash flows effectively, and engaging in financial planning, in order to maximize the benefits of external financing. For banking institutions, the findings suggest that credit provision should be accompanied by capacity-building initiatives, including financial literacy programs and basic financial management training, to enhance the productive use of credit among MSMEs. For policymakers, the study underscores the need for integrated MSME development strategies that combine improved access to financing with systematic efforts to enhance financial management

capability. Such integrated approaches are more likely to strengthen MSME resilience and support sustainable economic development in the long term.

REFERENCES

- [1.] Lee, S., & Carter, S. (2023). Financial management practices and SME survival: Evidence from developing economies. *Small Business Economics*, 60(2), 567–585. <https://doi.org/10.1007/s11187-022-00634-5>
- [2.] Lusardi, A., & Mitchell, O. S. (2017). Financial literacy and economic outcomes. *Journal of Economic Perspectives*, 31(2), 135–164. <https://doi.org/10.1257/jep.31.2.135>
- [3.] Nugroho, A., & Setiawan, D. (2023). MSME resilience during economic uncertainty: Evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, 10(4), 123–134.
- [4.] Nugroho, A., & Setiawan, D. (2024). Financial management capability and MSME sustainability. *International Journal of Business and Society*, 25(1), 45–60.
- [5.] Rahman, A., & Putri, S. A. (2022). Access to capital and MSME growth: Empirical evidence from Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 24(2), 89–101.
- [6.] Sekaran, U., & Bougie, R. (2020). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
- [7.] Sari, M., & Nugraha, A. (2023). Financial literacy and financial management practices of MSMEs. *Jurnal Keuangan dan Perbankan*, 27(3), 421–435.
- [8.] Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business models for sustainability. *Organization & Environment*, 29(3), 264–289.
- [9.] Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. *Handbook of Market Research*, 1–47.
- [10.] Storey, D. J. (2016). Understanding the small business sector. *Routledge*.
- [11.] Ullah, F., Abbas, Q., & Shah, S. Z. A. (2020). Financial constraints and SME performance. *Journal of Small Business and Enterprise Development*, 27(4), 657–676.
- [12.] World Bank. (2020). *SMEs finance: Improving access to finance for SMEs*. Washington, DC: World Bank.
- [13.] Yoshino, N., & Taghizadeh-Hesary, F. (2018). The role of SMEs in Asia and financing challenges. *ADB Working Paper Series*, No. 911.
- [14.] Zafar, A., & Mustafa, S. (2017). SMEs and its role in economic development. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(4), 195–205.
- [15.] Zhang, Y., & Bruning, E. (2019). Personal networks and SME financing. *Journal of Small Business Management*, 57(2), 513–531.
- [16.] Ates, A., & Bititci, U. (2011). Change process: A key enabler for building resilient SMEs. *International Journal of Production Research*, 49(18), 5601–5618.
- [17.] Bordonaba-Juste, V., Lucia-Palacios, L., & Polo-Redondo, Y. (2018). SMEs and sustainable business practices. *Journal of Business Ethics*, 147(1), 1–19.
- [18.] Kasseeah, H. (2016). Investigating the determinants of SME growth. *Journal of Small Business and Enterprise Development*, 23(3), 609–627.
- [19.] OECD. (2019). *OECD SME and entrepreneurship outlook*. Paris: OECD Publishing.
- [20.] Tambunan, T. (2019). *Recent evidence of the development of MSMEs in Indonesia*. ERIA Discussion Paper Series.