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The Role of Capital Access and Business Scale in Enhancing MSME Performance in Indonesia

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ABSTRACT

This study aims to investigate the effect of financial literacy, business strategy, and access to capital on the performance of MSMEs in Indonesia. This study also discusses the role of business scale as a moderator to facilitate the connection between access to capital and business performance. This study applies a quantitative approach with non-probability cluster sampling, collecting data from 271 MSME respondents in Indonesia. Analysis was conducted using the partial least squares structural equation modeling (PLS-SEM). Based on the findings, capital accessibility has a positive influence on MSME performance and this is strengthened by increased business size. There are no statistically significant effects from business strategy and financial literacy. This points to the fact that financial and strategic skills are valuable, but their influence might depend on other organizational capacities like size, infrastructure, or maturity of implementation. These results show the contribution of finance and operational capacity in MSME performance, but suggest that managerial skills and strategic ones can be enhanced in order to build performance improvement.

Keywords: MSME Performance, Financial Literacy, Business Strategy, Capital Access, Business Scale
JEL Classifications: G53, L25, M13

1. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) play a key role in Indonesia's economic growth, particularly economic inclusiveness, employment, and regional empowerment. According to Bank Indonesia and the Indonesian Banking Development Institute (LPPI), MSMEs are an invaluable pillar of national economy that contributes significantly to the formal and informal economies (Yanto et al., 2022; Setyaningrum et al., 2023). They are not just seen as a key driver of local economic resilience, but also as a strategic actor in enhancing entrepreneurship and reducing regional disparities (Setyaningrum et al., 2023; Virgia and Meirina, 2024) based on social and scalable business models. They play an economic role in constituting approximately 60.5% of Indonesia's GDP and engaging over 97% of the nation's workforce (Bank Indonesia and LPPI, 2022).

The unprecedented turnout reinforces the call for the sector to promote national development and social welfare. Having more than 64 million registered MSME business units, the sector's growth becomes central to productivity improvement and competitiveness. Improving MSME capabilities through improved finance access (Widyastuti et al., 2023), business strategies (Timotius, 2023), and institutional support (Ratnawati, 2020)—is thus central to inclusive and sustainable economic growth. Business performance is one of the high-priority aspects when assessing the success of micro, small, and medium enterprises (MSMEs) (Suminah et al., 2022), namely when measuring their ability to develop, compete, and sustain their business activities in the long term (Latifah et al., 2021; Widyastuti et al., 2023). Strategic actions such as revenue growth, profit margin (Hanggraeni and Sinamo, 2021; Wardana et al., 2022), customer loyalty, and market growth (Timotius, 2023) dictate the degree of MSMEs coordinating internal capability with external threats (Nurjannah et al., 2023).

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Performance improvement does not just benefit standalone businesses but also their collective national economic contribution and employment provision. Financial literacy is a desirable trait that ranks among the best determinants of MSME success (Charfeddine et al., 2024; Gunawan et al., 2023). Entrepreneurs who are more financially literate are able to budget, understand financial risk, and invest better (Nurjannah et al., 2023; Virgia and Meirina, 2024). Proof of MSMEs in Malang by Nuzil and Insan (2025) supports the fact that financial literacy has a positive effect on sustainable competitiveness and performance. On the other hand, poor financial knowledge often leads to liquidity problems, credit misuse, and business failure. Strengthening financial literacy is thus critical for future sustainability in business (Frimpong et al., 2022; Sari et al., 2025). In addition to financial competency, business strategy is a vital consideration in directing MSME operations (Timotius, 2023; Wardana et al., 2022).

Strategic management allows business organizations to anticipate market trends, allocate resources optimally, and have clearly established competitive positioning (Latifah et al., 2021). As claimed by Wediawati et al. (2021) and Lusardi and Mitchell (2023), MSMEs that practice explicit strategic planning such as differentiation or innovation-oriented strategies perform better operationally and financially than others. In contrast, the absence of strategic direction normally induces reactive decision-making and static behavior. Second, access to capital remains a key driver of MSME growth (Charfeddine et al., 2024; Widyastuti et al., 2023). It enables the businesses to invest in human capital, inventory, equipment, and technological tools (Yuliani et al., 2024; Widyastuti et al., 2023). Despite that, Indonesian MSMEs still find it difficult to access formal capital due to a lack of collateral or financial history. Abbas et al. (2025) mention previous studies indicating that access to capital has a significant impact on financial performance and sustainability. Strengthening inclusive financial systems and access to microcredit is thus crucial for more widespread MSME development.

Financial literacy, strategic planning, and access to capital are generally presumed in most studies to be beneficial (Charfeddine et al., 2024; Gunawan et al., 2023; Nurjannah et al., 2023). In reality, organizational aspects like size (ability, means, infrastructure) may play a crucial role in determining the scale of their impact (Charfeddine et al., 2024; Hanggraeni and Sinamo, 2021; Suminah et al., 2022). Micro-enterprises may have different strategies and tools than medium-sized enterprises to achieve similar performance. Multi-layered and context-specific theory models that take business scale into account are required (Al Mamun et al., 2019; Bouguerra et al., 2022). This suggests business size as a key lens. This defines the scope and capacity for operations of an enterprise, which in turn can influence how well these external and internal drivers deliver into concrete outcomes. That is, an effectively designed medium-scale business might be able to gain more from financial literacy or access to funds than a micro-scale business with little capital. Firm size thus partially explains variability in impact, acting as a condition augmenting or diminishing the strength of other drivers (Charfeddine et al., 2024; Hanggraeni and Sinamo, 2021).

2. LITERATURE REVIEW

MSMEs' performance refers to the accomplishments that the small and medium-sized enterprises have attained with regards to their functions and business objectives that include increased profit, sales turnover, and customer base (Wardana et al., 2022; Widyastuti et al., 2023). It further includes measuring to what extent these accomplishments are improved compared to the competitors to bestow a suitable vision of the competitive firm's position (Mutegi et al., 2015). This examination helps MSMEs to quantify their performance and decide on areas they must strategically enhance in order to be competitive within the market. The outcome is quantified over a selected time frame with given criteria or standards. In essence, performance refers to the extent to which an organization has attained its goals. Different determinants can influence the level of MSME performance, including financial literacy, education level of the owner, location where the owner resides, location of the business, age, and so on. MSME managers need to understand the financial information that is best for their operations in order to function effectively. Such understanding helps them maximize profits, reduce losses, and effectively control operating costs. When these elements are effectively controlled, MSMEs will be able to attain their business objectives (Mutegi et al., 2015).

2.1. The Relationship between Financial Literacy and Business Performance

Financial literacy of MSMEs entails an understanding and the ability to handle business financial affairs in an effective manner, which consists of three main aspects: Debt literacy, bookkeeping literacy, and budgeting literacy (Charfeddine et al., 2024; Gunawan et al., 2023; Nurjannah et al., 2023). Debt literacy is the ability to understand and handle debt, e.g., calculation of loan interest that impacts the financial situation of the business. This is important for MSMEs to make sound loan choices and not end up over-burdened by debt. Bookkeeping literacy involves the ability to record financial transactions fully and systematically, allowing business owners to monitor cash flow, profit, and spending. Sound bookkeeping allows MSMEs to make informed decisions based on clear financial facts. Previous studies by Virgia and Meirina (2024) found that financial literacy including bookkeeping and budgeting literacy has a significant positive impact on MSME business performance, meaning the better the knowledge of bookkeeping and budgeting, the better the business performance. However, debt literacy has a significantly negative impact on MSME performance, indicating that greater knowledge in debt management may be associated with lower business performance. Given this rationale, it is reasonable to propose the following hypothesis:

- H_1: Financial literacy has a significantly positive effect on MSME business performance.

2.2. The Relationship between Business Strategy and Business Performance

For MSMEs, a business strategy is a plan designed to achieve long-term goals and increase competitiveness in the market. One important indicator is the ability to expand market segments to attract more customers. In addition, the ability to achieve business

profitability is key to ensuring the business not only survives but also grows sustainably (Wardana et al., 2022; Widyastuti et al., 2023). MSMEs also need to be capable of achieving sales volume targets, which reflect operational effectiveness. The ability to achieve average sales growth targets also indicates the success of business strategies in consistently increasing revenue. Studies by Wardana et al. (2022) show that business strategy has a significant positive effect on MSME performance. This means the more effective the strategy implemented, the better the performance, including increased sales, profits, and customer growth. From this explanation, the following hypothesis can be drawn:

- H_2: Business strategy has a significantly positive effect on MSME business performance.

2.3. Capital Access and Performance of the Firm

Capital access is one of the most important drivers of MSME performance (Widyastuti et al., 2023; Yuliani et al., 2024). This can be seen from such performance measures as revenue growth, innovation capacity, and market growth. MSMEs with sound access to funding sources like bank loans, investments, or government support can invest to scale up operations, enhance product quality, and implement new technologies. Furthermore, enough capital allows MSMEs to respond effectively to changes in the market and consumer demands. Accordingly, sound capital access directly promotes enhanced competitiveness and sustainability in the face of increased competition. Availability of capital plays a vital part in funding MSME performance by allowing the creation of products and confirming that there is sufficient liquidity to fund operational costs and guarantee cash flow. Studies by Eton et al. (2021), Yuliani et al. (2024), and Christy dan Laily Nisa (2024) confirm that access to capital has a positive effect on MSME performance. This suggests that the quality of capital access, the higher it is, the easier it is for MSMEs to improve sales and business performance. Thus, this motivates the formation of the following hypothesis:

- H_3: Capital access has a significantly positive effect on MSME business performance

2.4. Business Scale as the Mediating Role in the Relationship between Capital Access and MSME Performance

Access to capital is one of the main drivers of micro, small, and medium enterprises (MSMEs) performance (Corvino et al., 2019; Norvadewi and Zaroni, 2024). Access to capital enables firms to finance production activities, adopt new technology, expand into new markets, and increase working capacity. But the impact of access to capital is not the same for every MSME it may be varied depending upon company size. Business scale, in this case, refers to the extent of operations, typically measured by revenue, employees, or asset ownership. Larger MSMEs have more institutional financial management mechanisms, better human resources, and greater ability to absorb and utilize external funds effectively. These are more likely to allocate additional resources to productive investments with a direct influence on business growth, such as marketing expansion, innovation, or capacity building (Carrasco-Carvajal et al., 2023; Tubastuvi et al., 2024).

In contrast, small MSMEs may face operational, managerial, or financial constraints that inhibit their ability to extract maximum gains from capital access. This means that business size is a moderating factor enhancing or diminishing the influence of capital availability on business performance. Norvadewi and Zaroni, (2024) discovered that business size greatly affects the way MSMEs use financial resources, with the observation that larger firms are likely to record more improvement in performance from increased access to capital. Just like how Corvino et al. (2019) aimed to demonstrate that firm size mediates the performance-intangible resources relationship (e.g., relational capital), thus suggesting leverage in the ability to transform resources into competitive advantage, so too is it critical therefore, when determining the determinants of MSME performance, that not only is availability of capital being considered but also the ability of the enterprise as based on size to transform that capital into measurable business outcomes. According to the rationale, the following hypothesis may be formulated:

- H_4: Business scale mediates the relationship between capital access and MSME business performance

3. METHODOLOGY

The research employed a quantitative approach with a cross-sectional design in order to test the impact of financial literacy, business strategy, and access to capital on business performance for Indonesia micro, small, and medium enterprises (MSMEs) in Indonesia. The study also sought to explore the moderating effect of business size on the relationship between the availability of capital and business success. Non-probability cluster sampling was employed, focusing on MSMEs in the Metropolitan Cluster areas. 271 MSME respondents were selected for representativeness across sectors and business size. Data were collected using a guided questionnaire and treated using partial least squares structural equation modeling (PLS-SEM) using WarpPLS version 8.0. Sample size was determined using the minimum of 10 times indicators of the most complex construct, in accordance with guidelines for PLS-SEM. Model reliability and validity were established based on composite reliability, AVE, and discriminant validity measures, while hypothesis testing was conducted using path coefficients and moderating analysis. The method allowed for full examination of direct and moderated relationships and offered empirical findings regarding MSME determinants of performance.

4. RESULTS

The outer model evaluation was conducted using WarpPLS 8.0 to assess the validity and reliability of the measurement model. Validity was examined through indicator loading factors, cross-loading values, and the average variance extracted (AVE) to ensure that each item accurately measures its intended construct. Reliability was tested using composite reliability and Cronbach's alpha to confirm internal consistency. This step ensures that the measurement model is robust and that all latent variables are measured accurately and consistently before testing the structural model.

Referring to the Table 1, the results of testing the outer loading for financial literacy (fl) showed that four statement items had an

Table 1: Validity testing using loading and cross-loading factors

Items	FinLit	BusStart	CapAcc	BusPer	BusScale
fl1	(0.743)	0.256	−0.248	0.003	−0.024
fl2	(0.753)	0.244	−0.203	-0.038	−0.117
fl5	(0.664)	−0.236	0.367	−0.076	0.202
fl6	(0.642)	−0.266	0.468	−0.164	0.062
fl8	(0.742)	−0.150	−0.147	0.014	0.061
fl9	(0.759)	−0.038	0.004	0.093	0.087
fl10	(0.793)	0.133	−0.117	0.124	−0.020
bs1	0.016	(0.745)	0.089	−0.117	−0.005
bs2	0.111	(0.834)	−0.050	−0.025	−0.002
bs4	−0.276	(0.636)	−0.065	−0.070	0.089
bs5	0.097	(0.734)	0.022	0.207	−0.033
ca1	−0.021	−0.019	(0.772)	0.178	0.042
ca2	0.014	0.023	(0.793)	0.020	0.216
ca3	−0.202	0.012	(0.762)	-0.106	−0.134
ca4	0.272	0.015	(0.794)	0.017	0.000
ca5	−0.071	0.056	(0.807)	−0.105	0.141
bp1	0.133	−0.067	0.016	(0.801)	0.017
bp2	−0.232	0.157	0.075	(0.759)	0.014
bp3	0.138	0.084	−0.109	(0.709)	−0.103
bp4	0.068	0.125	−0.072	(0.690)	−0.103
bp5	0.124	−0.132	−0.024	(0.706)	−0.108
bp6	−0.206	−0.148	0.127	(0.789)	0.014
bsc1	−0.145	−0.014	0.177	−0.054	(0.747)
bsc2	−0.019	−0.046	0.009	0.096	(0.780)
bsc3	0.069	0.038	−0.039	−0.064	(0.801)
bsc4	0.035	0.255	−0.031	0.058	(0.627)
bsc5	0.066	−0.117	−0.125	−0.026	(0.709)

outer loading value ≥0.70, indicating that they are highly valid and two items were 0.6-0.7 which were moderately valid. Similarly, for business strategy (bs), three statement items had an outer loading value ≥0.70, confirming their validity and suitability for testing, while one item was 0.6-0.7. All items of capital access were excellently valid having outer loading value ≥0.70. The rest of variables items of business performance (bp) and business scale (bsc) were all highly valid leaving bp4 and bsc4 which were between 0.6 and 0.7. In summary, all items were valid and could be processed. Anyhow, in the process of outer model evaluation to keep the validity proper to process, some items with loading factors under 0.6 were deleted, namely fl4, fl7, bs3. Table 1 also shows that the outer loading values for the researcher's construct indicators are greater than the cross-loading values for the other constructs.

Based on the Table 2, all constructs recorded average variance extracted (AVE) values exceeding 0.50. The AVE value for the financial literacy variable was 0.529, business strategy was 0.549, capital access reached 0.617, business performance was 0.553, and business scale was 0.541. These results indicate that each construct meets the minimum threshold for convergent validity, as all AVE values are above the acceptable cutoff of 0.50.

Referring to the Table 3, the results of the Cronbach's alpha test also show that all constructs meet the minimum value requirements. Specifically, Financial literacy = 0.850 >0.60, Business strategy= 0.722 >0.60, Capital access = 0.845 >0.60, Business performance = 0.837 >0.60 and Business scale = 0.785 >0.60. Additionally, the results of the composite reliability test show

Table 2: Average variance extracted

Construct	AVE
FinLit	0.529
BusStrat	0.549
CapAcc	0.617
BusPer	0.553
BusScale	0.541

Table 3: Reliability testing

Construct	Cronbach's alpha (CA)	Composite reliability (CR)
FinLit	0.850	0.887
BusStrat	0.722	0.828
CapAcc	0.845	0.890
BusPer	0.837	0.881
BusScale	0.785	0.854

that all constructs for each variable in this study meet the minimum value requirement. Specifically, Financial literacy = 0.887 >0.70, Business strategy= 0.828 >0.70, Capital access = 0.890 >0.70, Business performance = 0.881 >0.70 and Business scale = 0.854 >0.70. Therefore, it can be concluded that all constructs meet the composite reliability criteria. Hence, all constructs have met the criteria for both composite reliability and Cronbach's alpha.

The inner model evaluation in Figure 1 was carried out to test the research hypotheses by analyzing the structural relationships between latent variables using path coefficients, significance levels, and the overall model fit.

Figure 1 illustrates the inner structural model used to examine the direct relationships between Financial Literacy (FinLit), Business Strategy (BusStrat), Capital Access (CapAcc), and business performance (BusPer), including the moderating role of business scale (BusScale). The model was evaluated using partial least squares (PLS) Warp analysis, with an R-square value of 0.10 for business performance. This indicates that the combined explanatory power of FinLit, BusStrat, CapAcc, and the interaction term CapAcc*BusScale accounts for only 10% of the variance in business performance, suggesting a weak overall model fit and limited predictive strength.

Table 4 presents hypothesis testing through path coefficient (β) and significance level (P-value) analysis. The direct effect of financial literacy on business performance yielded $\beta = 0.04$ with $P = 0.26$, while business strategy yielded $\beta = 0.05$ with $P = 0.19$. Both are statistically not significant, indicating that financial literacy and strategic orientation do not individually contribute significantly to MSME performance in the present context. In contrast, capital access played a substantial and significant role in business performance ($\beta = 0.35$, $P < 0.01$), supporting its necessity in enabling MSMEs to achieve better performance levels. Moreover, the interaction term CapAcc*BusScale also significantly and positively affected ($\beta = 0.25$, $P < 0.01$), showing that the effect of capital access is supported if MSMEs operate their businesses on a larger scale. This moderating effect underscores the importance of firm size in scaling financial resources for enhanced performance.

The results of the study in Table 5 show R-squared is 0.10, whereas both APC (0.172), $P < 0.001$ and ARS (0.103), $P = 0.021$ are not

Figure 1: Inner model

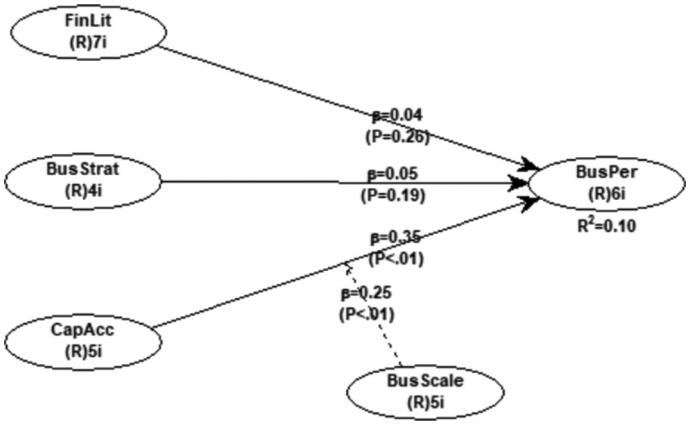


Table 4: Hypotheses testing

Hypotheses	β-values	P-values
H_1: FinLit-->BusPer	0.04	0.26
H_2: BusStrat-->BusPer	0.05	0.19
H_3: CapAcc-->BusPer	0.35	<0.01
H_4: CapAcc*BusScale-->BusPer	0.25	<0.01

Table 5: Summary of model fit and diagnostic indicators

Item	Value	Conclusion
Average path coefficient (APC)	0.172; P<0.001	Statistically significant, but low effect size; model lacks explanatory strength
Average R-squared (ARS)	0.103; P=0.021	Not statistically significant (P>0.001); weak variance explanation
Average full collinearity VIF (AVIF)	<3.3	Acceptable; no multicollinearity detected

significant (P > 0.001), though AVIF is good (<3.3), it shows that the model lacks explanatory power and statistical significance, i.e., the independent variables do not explain the variation in the dependent variable to a great extent. However, multicollinearity is not an issue, as shown by the acceptable AVIF. Revisiting the theoretical model, amending or substituting the predictor variables, and possibly collecting more data to increase model validity and significance are recommended.

5. DISCUSSION

Discussion of all hypotheses testing are as follows:

5.1. Hypothesis 1 Testing

Inner model estimation using WarpPLS 8.0 for Hypothesis 1 that financial literacy significantly affects MSME business performance gave a path coefficient (β) = 0.04 and P = 0.26. This suggests that the relationship has no statistical significance, meaning that financial literacy, operationalized through the convenience, safety, efficiency, and payment facilitation of FinTech transactional techniques, has no effect on the performance of the businesses analyzed in this study. In the context of the 271 Indonesia MSME respondents, financial literacy, while important, should not be expected to improve business performance. This implies that MSME owners likely know some basics of finance or are digitally acquainted with some financial tools, yet that knowledge is not exploited in core strategic financial decision processes or in practices that drive performance. The analytical tendency here reveals the possible gap between finance knowledge and its daily usage in business operation. The finding differs with previous studies by Nuzil and Insan (2021) and Purwaningsih and Kusuma (2015), which determined that internal factors like financial capital play a significant role in SME performance. One explanation is that financial literacy, though a valuable managerial skill, has an indirect impact on performance, maybe through impacting strategic decisions or e-adoption, but not resulting in direct performance enhancement.

5.2. Hypothesis 2 Testing

The hypothesis 2 results show that, with a path coefficient (β) of 0.05 and a P = 0.19, business strategy does not significantly affect MSME business performance. While business strategy may be of theoretical relevance, the empirical data obtained from MSMEs located in Indonesia showed no direct impact on performance. This indicates that strategic efforts such as customer acquisition, profit enhancement initiatives, sales target attainment, and innovative promotion may be poorly structured, infrequent, or employed at a level that does not significantly influence the performance of the business in this context (Soares, 2023). Otherwise, these strategies may be in intention but have not yet been translated into behavior or monitored for effectiveness, thereby weakening their performance outcomes. These findings are contrary to the available literature by Wediawati et al. (2021), Suriyanti and Binangkit (2019), and Hartato and Handoyo (2021), who all reported a positive significant relationship between strategic management and the performance of SMEs. An possible explanation for this mismatch is that the MSMEs in this study can still rely on operational improvisation rather than formal, data-driven strategies. Further, extraneous variables such as market uncertainty, competition, or resource limitations may undermine the possible positive effects of strategy implementation. This indicates the need for capacity building for MSME owners in not only creating competitive strategies but also implementing and evaluating them in a systematic way. Interventions such as strategic planning workshops, digital marketing training, and mentoring on performance monitoring could bridge the gap between strategy and performance in the Indonesia MSME ecosystem.

5.3. Hypothesis 3 Testing

The Hypothesis 3 test confirms that capital access has a statistically significant and positive effect on MSME business performance with a path coefficient (β) of 0.35 and a P < 0.01. This indicates a tight relationship between access to finance and the superior performance of Indonesia MSMEs. The findings suggest that MSMEs with access to credit limits in line with their business, favorable interest rates, more than one source of funds, repayment schedules that are not too burdensome, and collateral requirements that are not expensive are likely to enhance their business activities, grow sustainably, and achieve financial objectives. This result is in line with Abbas and Hutauruk (2021) and Zulfadhli et al. (2024) who emphasized that access to capital is pivotal for financial performance and business long-term viability. Similarly,

Rohila et al. (2024) and Christy (2024) argue that improving the inclusiveness of financial systems and improving MSME access to microcredit can have a significant role in business growth. These studies validate that financial access is not just a question of availability but also of suitability and adaptability to MSME specific conditions. One of the main areas that still need to be dealt with in order to let MSMEs blossom is the access to finance. It is crucial for the decision-makers, investors, and international organizations to keep on establishing inclusive financing schemes that are tailored specifically to the characteristics of the small businesses, especially with respect to loans, interest rates, and collateral. Moreover, the initiatives that will inform the MSMEs about the financing possibilities and the correct way of using the financial resources to their advantage will also be necessary. By rendering access to capital both accessible and effectively utilized, stakeholders can help a stronger and more competitive MSME sector in Indonesia.

5.4. Hypothesis 4 Testing

The results of Hypothesis 4 tests indicate that business scale significantly moderates the effect of capital access on MSME business performance, with a path coefficient (β) of 0.25 and a $P < 0.01$. This indicates a statistically significant interaction, meaning that the relationship between capital access and business performance is stronger when MSMEs operate their businesses on a larger scale. This finding implies that MSMEs with a higher scale of operation reflected in more number of employees, higher asset ownership, higher sales volume, higher market reach, and rising capital are able to utilize financial access more effectively towards improving their performance. In other words, while access to capital is beneficial to all MSMEs, its effect is stronger if the firm is already at a scale and has the infrastructure to absorb and use funds more strategically. This result is consistent with previous research by Zaborovskaia et al. (2020) and Phuensane (2020), both of which confirmed that firm size or scale strengthens the influence of financial input or innovation on firm performance.

These studies emphasize that larger businesses are likely to possess better managerial capacity, broader market scope, and more experience, making them more efficient in using capital. Moreover, the role of business scale as a moderator in enhancing the impact of capital access is in agreement with resource-based theory and contingency theory, which hold that organizational resources have greater performance impacts when matched with appropriate structural competences. In the context of MSMEs, scale-dependent attributes such as operational maturity, labor specialization, and logistic infrastructure serve as amplifiers that convert financial inputs into tangible performance gains. The implication is that policy efforts to increase MSME access to finance need to be complemented by capacity-building initiatives to support scaling-up endeavors. Without sufficient scale, MSMEs would not be in a position to absorb and make effective use of financial inputs, and hence, would continue to exhibit inferior performance outcomes. Therefore, R&D programs in the future need to consider integrated models that address financial access and scalability simultaneously to support improved sustainable growth among MSMEs.

6. CONCLUSION

The analysis of the study conducted in Indonesia, concerning the performance of micro, small, and medium enterprises (MSMEs), included the factors of financial literacy, business strategy, and capital access, and also the moderating role of business scale in the relationship between capital access and business performance. Among the three direct predictors, only the access to capital was found to have a significant and positive effect on the MSME business performance. This denotes that the access to proper financing like appropriate credit limits, fair interest rates, easily available funding sources, and flexible repayment terms could result in better business outcomes if managed well. On the other hand, financial literacy and business strategy were statistically found to be insignificant factors affecting performance. This means that these factors, while important in theory, may not alone lead to quantifiable improvements in performance without being complemented with execution capability, market dynamics, or managerial competence. However, the study points out that the business scale has an important role in moderating the relationship between capital access and the performance of MSMEs. The larger the MSMEs in terms of assets, sales, market reach, and workforce size, the more they are able to convert capital access into better performance results. The research gives a message that MSME performance in Indonesia is not only a matter of capital access but also of the capability and proper management of the financial resources. Therefore, in the case of future support programs, it would be preferable to combine the financing initiatives along with business development services which would reinforce the internal capacity, operational scale, and management skills of the business.

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