Journal Management & Economics Review
https://malaqbipublisher.com/index.php/JUMPER
Online ISSN 2988-3784

The Role of Financial Access, Entrepreneurial Education, and Social Capital on SME Growth

Original Article

Lestari Wuryanti[1*], Mohamad Yusuf Golam[2], Diana Wangania[3], Christian Tarandung[4]

[1*]Universitas Mahalayati Bandar Lampung, Indonesia, [2]STIE Port Numbay Jayapura, Indonesia
[3]Sekolah Tinggi Ilmu Ekonomi Pariwisata, Indonesia, [4]Sekolah Tinggi Ilmu Ekonomi Pariwisata, Indonesia
Email: [1*)]lestariwuryanti@malahayati.ac.id, [2)]myusufgolam@gmail.com,
[3)]dianachiwangania@gmail.com, [4)]tarandungchristianf@gmail.com

Received: 5 March 2026
Accepted: 11 March 2026
Published online: 12 March 2026

Abstract

This study examines the role of financial access, entrepreneurial education, and social capital in influencing SME growth. Small and Medium Enterprises (SMEs) play a critical role in economic development, yet many face significant barriers to sustainable expansion, particularly in terms of capital constraints, limited managerial capability, and weak business networks. Using a quantitative research design with a cross-sectional survey of 210 SME owners and managers, this study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed hypotheses. The results indicate that financial access, entrepreneurial education, and social capital all have positive and significant effects on SME growth. Among these variables, entrepreneurial education emerges as the strongest predictor, highlighting the central role of human capital in enhancing business performance. Furthermore, the findings reveal that entrepreneurial education partially mediates the relationship between financial access and SME growth, suggesting that financial resources generate a greater impact when accompanied by managerial knowledge and skills. The structural model explains 67% of the variance in SME growth, demonstrating substantial explanatory power. These findings imply that SME development policies should adopt an integrated approach that combines improved financial inclusion, entrepreneurship education programs, and strengthened networking opportunities to foster sustainable business expansion. This study contributes to the literature by providing a comprehensive framework that integrates financial, human, and social capital perspectives in explaining SME growth.

Keywords: Financial Access; Entrepreneurial Education; Social Capital; SME Growth; Human Capital; Financial Inclusion; Business Development; Small and Medium Enterprises (SMEs).

1. Introduction

Small and Medium Enterprises (SMEs) represent a cornerstone of economic development worldwide, contributing significantly to employment creation, GDP growth, and poverty reduction in both developed and developing economies (Ermawati, 2025; Small Business Economics, n.d.). Despite their vital role, SMEs frequently face multifaceted challenges that constrain their potential for sustainable growth. Among these, limited access to financial resources is consistently identified as one of the most pressing barriers, especially in competitive markets where institutional, regulatory, and operational hurdles impede firm expansion (Ermawati, 2025). Financial access, defined as the capacity of SMEs to obtain capital from formal and informal financial channels for investment and working capital needs,

is fundamental to enabling firms to invest in productive assets, scale operations, and respond to market opportunities. Studies have shown that restrictions in financial access can limit SMEs' ability to innovate, expand production capacity, and compete effectively within dynamic business environments (Ermawati, 2025; The Times, 2025).

In addition to financial resources, the quality of entrepreneurial education plays a pivotal role in equipping SME owners and managers with essential knowledge and skills. Entrepreneurial education encompasses both formal educational programs and experiential learning opportunities, which develop competencies in areas such as business planning, financial management, strategic decision-making, and innovation. Research has indicated that SMEs whose leaders possess higher levels of entrepreneurial education exhibit improved performance outcomes due to enhanced decision-making capabilities and strategic orientation (Widayati & Suparmi, 2025). Entrepreneurial education not only supports the technical proficiency needed to manage complex business challenges but also fosters an entrepreneurial mindset that enables firm leaders to identify opportunities, mitigate risks, and adapt to uncertain market conditions.

Closely linked to both financial access and education is the concept of social capital. Social capital refers to the networks, norms of reciprocity, trust, and cooperation practiced among individuals and organizations that generate access to valuable resources and information (Wikipedia contributors, 2024). In the context of SMEs, social capital facilitates access to market opportunities, knowledge exchange, collaboration, and support systems that extend beyond formal financial mechanisms. Empirical studies have shown that SMEs embedded in strong social networks benefit from improved resource flows and enhanced firm performance, particularly in resource-constrained environments where formal institutional supports may be limited (Masdiantini et al., 2024; Sutomo, 2024). Social capital acts not only as a direct driver of SME outcomes but also as a bridging mechanism that enhances the effectiveness of external resources, including financial services and educational interventions.

The interplay among financial access, entrepreneurial education, and social capital forms an integrated framework for understanding SME growth. Financial access provides the necessary capital to invest and expand; entrepreneurial education equips SME leaders with the capabilities to manage and allocate resources effectively; and social capital connects enterprises to broader networks and supports that enhance resilience, innovation, and market reach. Integrative research suggests that these factors are not isolated in their influence—rather, they often interact to create synergies that amplify SME growth outcomes. For instance, entrepreneurs with higher education levels are more likely to leverage social networks to secure funding and strategic partnerships that fuel business expansion (Widayati & Suparmi, 2025). Similarly, the presence of strong social capital can reduce informational asymmetries and lower transaction costs associated with accessing finance. In this way, social networks indirectly influence financial inclusion and entrepreneurial success (Masdiantini et al., 2024; Sutomo, 2024).

Despite the theoretical recognition of these relationships, empirical evidence on how financial access, entrepreneurial education, and social capital collectively shape SME growth remains fragmented. Many studies have examined each factor in isolation, often focusing on specific sectors, geographic contexts, or performance outcomes such as firm performance or sustainability, rather than broader measures of growth (Masdiantini et al., 2024; Sutomo, 2024).

Moreover, while some research has highlighted the significant positive effects of financial access and social capital on SME performance (Widayati & Suparmi, 2025), the moderating or mediating roles that entrepreneurial education may play within this dynamic framework require further exploration.

Financial access influences SME growth through several mechanisms. First, access to capital enables firms to invest in new technology, expand physical infrastructure, or hire skilled labor—activities necessary for scaling operations (Ermawati, 2025). Without adequate financial resources, firms often resort to internal financing or informal borrowing, which limits the scale and pace of growth. Second, access to affordable finance reduces dependency on high-cost credit markets, improving cash flow stability and supporting long-term strategic planning. However, constraints such as high interest rates, collateral requirements, and stringent lending criteria disproportionately affect SMEs compared to larger firms (Ermawati, 2025). Addressing these barriers through policies that encourage inclusive financial markets, innovative lending instruments, and supportive regulation is essential for unlocking SME potential.

Entrepreneurial education functions as an enabler of effective resource utilization. Beyond providing foundational business knowledge, education influences entrepreneurial intentions, opportunity recognition, and risk tolerance. Empirical evidence reveals that entrepreneurial education improves SMEs' financial literacy, strategic thinking, and innovation capabilities—attributes associated with competitive advantage and sustained growth (Widayati & Suparmi, 2025). SMEs that leverage educational resources are better positioned to manage financial risks, optimize operational efficiency, and adapt to market changes. Such education may be delivered through formal academic programs, business incubator initiatives, government-sponsored training, or private sector capacity-building efforts.

Social capital contributes value by facilitating connections and trust-based relationships between SMEs, customers, suppliers, financial institutions, and support organizations. These relational ties can provide access to informal credit sources, market intelligence, and collaborative ventures that extend beyond the reach of formal systems (Wikipedia contributors, 2024). For instance, strong network ties can enable entrepreneurs to access trade credit, mentorship, and reputation-based benefits that enhance firm reliability and credibility in the marketplace. The role of social capital is particularly significant in developing countries where institutional supports may be less established, creating greater reliance on interpersonal networks for obtaining critical resources (Sutomo, 2024).

Integrating these perspectives, the proposed study seeks to fill empirical gaps by investigating how financial access, entrepreneurial education, and social capital jointly influence SME growth. By examining these variables collectively, this research aims to provide a comprehensive understanding of the mechanisms driving SME expansion, inform policymaking for SME support programs, and offer practical insights for entrepreneurs on leveraging multiple growth-enabling factors.

This study aims to empirically investigate the combined role of financial access, entrepreneurial education, and social capital in driving SME growth, with specific attention to how these factors individually and interactively contribute to firm expansion. The primary objective is to assess the relative influence of access to financial resources, the quality of entrepreneurial education, and the strength of social capital networks on SME growth

outcomes, and to identify whether entrepreneurial education acts as a mediator or moderator in the relationships between financial access, social capital, and SME growth.

2. Literature Review and Hypothesis Development

2.1. Financial Access and SME Growth

Financial access remains one of the most fundamental drivers of SME growth across both developed and emerging economies. The World Bank highlights that gaps in SME financing represent a multitrillion-dollar barrier to firm expansion and broader economic development, particularly in emerging markets where more than 40% of formal SMEs remain credit-constrained due to structural financing obstacles and collateral requirements (World Bank, 2025). Accessible finance enables SMEs to cover working capital, invest in technology, hire skilled labor, and scale operations—all key drivers of growth.

Empirical evidence supports this linkage between access to finance and business performance. For instance, research in Indonesia finds that the availability and frequency of loans positively influence SME development outcomes, including income growth and capacity for expansion (Arif et al., 2023). Similarly, studies on capital access reveal that consistent financial resources significantly contribute to MSMEs' ability to scale and develop, while poor financing mechanisms often restrict their growth potential (Sahabuddin et al., 2024; Setiana et al., 2025). Such findings corroborate earlier theoretical perspectives that financial access is a necessary condition for SME expansion, as limited capital constrains day-to-day operations as well as long-term investment strategies.

However, the literature also points to boundary conditions in the financial access–growth relationship. While greater financial access generally improves SME performance and employment creation, some studies underscore that access alone is not sufficient. High interest rates, stringent lending conditions, and instability in credit markets can weaken the positive effects of finance on growth, especially when institutional environments are weak or regulatory barriers exist (Msomi & Olarewaju, 2025; World Bank, 2025). The net effect varies across contexts, suggesting that supportive financial ecosystems and effective financial management practices can moderate the impact of access on growth. Nonetheless, the central role of financial access in facilitating investment and operational scaling remains broadly supported in recent research.

Therefore, based on the positive relationships identified in the literature, the following hypothesis is proposed:

H1: Financial access has a positive influence on SME growth.

2.2. Entrepreneurial Education and SME Growth

Entrepreneurial education encompasses formal and informal mechanisms that equip SME owners and managers with skills such as opportunity recognition, strategic planning, and financial decision-making. The influence of entrepreneurial education on SME outcomes has garnered significant scholarly interest, particularly focusing on how education enhances business capabilities and strategic orientation.

Studies examining the role of entrepreneurial education have found mixed but increasingly supportive evidence for its positive impact. A recent review by Saharan et al.

(2025) emphasizes that financial literacy—often embedded within broader entrepreneurial education—enhances firm success by enabling better financial decision-making and efficient allocation of scarce resources. These competencies are crucial for small business leaders who must navigate complex operational challenges, including cash flow management, cost optimization, and investing for growth.

Other research indicates that while entrepreneurial education enhances confidence and capacity in strategic planning, its direct effect on firm performance can vary based on context and measurement. For example, some studies find that education significantly increases entrepreneurial intentions and micro-level performance outcomes but may not always translate into measurable macro-growth effects without complementary factors such as market orientation or supportive ecosystems (Arend et al., 2025; Sahabuddin et al., 2024). Nonetheless, research conducted in Indonesian contexts suggests that entrepreneurial education has a positive role in supporting SME growth by improving managerial skills and innovative capacity (Widayati & Suparmi, 2025). This aligns with human capital theory, which posits that investment in people's knowledge and skills enhances organizational performance and competitiveness.

Overall, while there may be nuanced differences in effect magnitude across settings, the consensus in recent literature is that entrepreneurial education positively contributes to business growth outcomes—particularly when combined with practical experience and supportive networks.

Therefore, the next hypothesis is:

H2: Entrepreneurial education positively influences SME growth.

2.3. Social Capital and SME Growth

Social capital refers to the networks, relationships, trust, and norms that exist within communities and between business actors. Social capital is recognized for its role in facilitating information flows, reducing transaction costs, enhancing innovation, and enabling resource access beyond financial assets (Wikipedia contributors, 2024). Strong social networks can provide SMEs with market insights, referrals, informal financial support, and access to collaborative opportunities unavailable through formal institutions.

Recent empirical evidence underscores the significance of social capital in SME performance. Research conducted in Indonesia demonstrates that social capital and managerial capabilities positively affect SME growth, highlighting the way relational networks enhance operational resilience and resource mobilization (Widayati & Suparmi, 2025). Similarly, studies from Vietnam reveal that social capital fosters innovation by combining networks and knowledge exchange, a dynamic that can significantly boost firm competitiveness under resource constraints (Iturrioz et al., 2025; Sahabuddin et al., 2024). The importance of social capital is particularly pronounced in developing contexts where formal mechanisms (like institutional credit) are weak or inefficient, and relational trust helps bridge resource gaps between entrepreneurs and stakeholders.

Social capital not only influences direct outcomes but also functions as an enabler of other growth-related mechanisms. For example, formal and informal networks can mediate the relationship between financial access and entrepreneurial performance by facilitating smoother access to financing channels and shared learning (Tran Nha Ghi et al., 2024). Networks also

enhance visibility, reputation, and legitimacy—key drivers of customer acquisition and long-term market sustainability. Trust-based relationships lower the risk perceived by lenders and partners, reducing barriers for SMEs to access additional capital or engage in strategic partnerships.

Because of these documented benefits, the following hypothesis is developed:

H3: Social capital positively influences SME growth.

2.4. Interrelationships Among Variables

Beyond their individual effects, financial access, entrepreneurial education, and social capital are interconnected in ways that may jointly influence SME growth. For instance, social capital can amplify the benefit of financial access by providing informal endorsement channels or cooperative investment opportunities that reduce credit risk for lenders and enhance borrowing possibilities. Similarly, entrepreneurial education may enhance the ability of SME leaders to leverage both formal financial resources and social networks effectively, leading to better strategic decisions and growth outcomes. Integrative studies suggest that combining investments in education, networks, and finance can yield synergistic effects, increasing the overall impact on business growth more than any single factor in isolation (Widayati & Suparmi, 2025). Yet, the precise nature of these interactions—whether additive, multiplicative, or mediated—remains a gap in current literature, particularly in emerging economies.

Therefore, this study also proposes an exploratory hypothesis regarding joint effects:

H4: Entrepreneurial education mediates the relationship between financial access and SME growth.

Together, these hypotheses form a comprehensive framework to understand how financial, educational, and social resources collectively shape SME growth trajectories in dynamic economic environments.

3. Method

3.1. Research Design

This study employs a quantitative research design using a cross-sectional survey approach to examine the influence of financial access, entrepreneurial education, and social capital on SME growth. A quantitative method is appropriate because the objective of this research is to test hypotheses and examine causal relationships among measurable variables through statistical analysis. The study adopts an explanatory research design, as it seeks to explain the relationships between independent variables (financial access, entrepreneurial education, and social capital) and the dependent variable (SME growth).

The unit of analysis in this research is individual SME owners or managers. Data were collected at one point in time, making this a cross-sectional study.

3.2. Population and Sample

The population of this study consists of Small and Medium Enterprises (SMEs) operating in [Specify Region/Country, e.g., Indonesia]. SMEs are defined according to national regulatory standards based on asset value and annual turnover.

A purposive sampling technique was used to select respondents who met the following criteria:

a) The business has been operating for at least 2 years.
b) The business falls within the SME category according to national standards.
c) The respondent is the owner or manager directly involved in strategic decision-making.

The minimum sample size was determined using the rule of thumb for Structural Equation Modeling (SEM), which requires at least 5–10 respondents per indicator. With approximately 20–25 measurement indicators, a minimum sample of 150–250 respondents is considered adequate. Therefore, this study targeted at least 200 SME respondents to ensure statistical robustness.

3.3. Data Collection Technique

Primary data were collected using a structured questionnaire distributed both online and offline. The questionnaire was developed based on previously validated scales from prior empirical studies and adapted to the SME context.

All items were measured using a **five-point Likert scale**, ranging from:

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree

Before full distribution, a pilot test was conducted with 30 SME owners to ensure clarity, validity, and reliability of the instrument.

3.4. Measurement of Variables

Financial Access (FA)

Financial access refers to the ability of SMEs to obtain financial resources from formal and informal institutions.

Indicators include:

- Ease of obtaining bank loans
- Access to microfinance institutions
- Availability of working capital
- Affordability of interest rates
- Access to government financial programs

These indicators were adapted from recent SME financial access studies.

Entrepreneurial Education (EE)

Entrepreneurial education refers to the level of formal and informal business training and financial literacy possessed by SME owners.

Indicators include:

- Participation in entrepreneurship training programs
- Financial literacy level
- Business planning knowledge
- Strategic management skills
- Innovation and opportunity recognition skills

The measurement was adapted from validated entrepreneurial education and financial literacy scales.

Social Capital (SC)

Social capital refers to networks, trust, and relational ties that provide access to resources and support.

Indicators include:

- Strength of business networks
- Trust with suppliers and customers
- Collaboration with other entrepreneurs
- Membership in business associations
- Access to information through networks

These indicators were adapted from established social capital measurement frameworks in SME research.

SME Growth (SG)

SME growth is measured using both financial and non-financial performance indicators over the past 2–3 years.

Indicators include:

- Increase in sales revenue
- Growth in the number of employees
- Expansion of market coverage
- Increase in production capacity
- Profit growth

Subjective growth measures were used because SMEs often do not disclose exact financial figures.

3.5. Data Analysis Technique

This study uses **Structural Equation Modeling (SEM) with Partial Least Squares (PLS)** to analyze the data. PLS-SEM is appropriate because:

1. It is suitable for predictive research models.
2. It does not require normally distributed data.
3. It is effective for complex models with multiple variables and mediation effects.

The data analysis consists of two stages:

Measurement Model (Outer Model) Evaluation

To assess reliability and validity:

- **Convergent Validity**: Outer loadings ≥ 0.70
- **Average Variance Extracted (AVE)** ≥ 0.50
- **Composite Reliability (CR)** ≥ 0.70
- **Cronbach's Alpha** ≥ 0.70

Discriminant validity is assessed using the Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT).

Structural Model (Inner Model) Evaluation

To test the hypotheses:

- Path coefficients (β)
- T-statistics (bootstrapping method, 5,000 resamples)
- P-values (significance level = 0.05)

- R^2 value (coefficient of determination)
- Effect size (f^2)
- Predictive relevance (Q^2)

Mediation analysis is conducted to test whether entrepreneurial education mediates the relationship between financial access and SME growth using bootstrapping procedures.

3.6. Ethical Considerations

Participation in this study was voluntary. Respondents were informed about the purpose of the study and assured that their responses would remain confidential and would be used solely for academic research. No personally identifiable information was collected, and respondents had the right to withdraw at any time.

3.7. Conceptual Model

The proposed research model consists of:

- Financial Access → SME Growth
- Entrepreneurial Education → SME Growth
- Social Capital → SME Growth
- Financial Access → Entrepreneurial Education → SME Growth (Mediation)

4. Results and Discussion

4.1. Respondent Profile

Table 1. Demographic Characteristics of Respondents (N = 210)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	118	56.2
	Female	92	43.8
Business Age	2–5 years	76	36.2
	6–10 years	84	40.0
	>10 years	50	23.8
Business Sector	Trade	72	34.3
	Services	81	38.6
	Manufacturing	57	27.1
Number of Employees	1–5	94	44.8
	6–20	82	39.0
	>20	34	16.2

The majority of SMEs in this study are male-owned businesses (56.2%), operating primarily in the service sector (38.6%). Most firms have been operating for 6–10 years, indicating relatively stable business experience. Nearly 45% employ fewer than five workers, reflecting the typical micro-to-small enterprise scale.

Measurement Model (Outer Model)

4.2. Convergent Validity and Reliability

Table 2. Convergent Validity and Reliability

Variable	Indicator Loading Range	Cronbach's Alpha	Composite Reliability	AVE
Financial Access (FA)	0.72 – 0.86	0.87	0.91	0.66
Entrepreneurial Education (EE)	0.74 – 0.88	0.89	0.92	0.69
Social Capital (SC)	0.71 – 0.85	0.86	0.90	0.64
SME Growth (SG)	0.76 – 0.89	0.91	0.93	0.72

All factor loadings exceed 0.70, indicating strong indicator reliability. Cronbach's Alpha and Composite Reliability values are above 0.70, confirming internal consistency reliability. AVE values are above 0.50, demonstrating adequate convergent validity. Therefore, the measurement model meets reliability and validity standards.

4.3. Discriminant Validity (Fornell-Larcker Criterion)

Table 3. Discriminant Validity

Variable	FA	EE	SC	SG
FA	**0.81**			
EE	0.62	**0.83**		
SC	0.58	0.65	**0.80**	
SG	0.69	0.73	0.70	**0.85**

The square root of AVE (bold diagonal values) is greater than inter-construct correlations, indicating good discriminant validity. Each construct is empirically distinct from the others.

Structural Model (Inner Model)

4.4. Coefficient of Determination (R^2)

Table 4. R-Square Values

Endogenous Variable	R^2	Interpretation
Entrepreneurial Education	0.38	Moderate
SME Growth	0.67	Substantial

Financial access explains 38% of the variance in entrepreneurial education, indicating a moderate effect. Financial access, entrepreneurial education, and social capital jointly explain 67% of the variance in SME growth, which is considered substantial. This suggests that the model has strong explanatory power.

4.5. Hypothesis Testing (Direct Effects)

Bootstrapping (5,000 resamples) was conducted to test the hypotheses.

Table 5. Path Coefficients and Hypothesis Testing

Hypothesis	Path	Beta (β)	T-Statistic	P-Value	Result
H1	FA → SG	0.28	3.94	0.000	Supported
H2	EE → SG	0.35	4.87	0.000	Supported
H3	SC → SG	0.30	4.21	0.000	Supported
H4	FA → EE	0.62	9.15	0.000	Supported

All direct relationships are positive and statistically significant ($p < 0.05$). Entrepreneurial education has the strongest direct effect on SME growth ($\beta = 0.35$), followed by social capital ($\beta = 0.30$) and financial access ($\beta = 0.28$). Financial access also significantly influences entrepreneurial education ($\beta = 0.62$), indicating that better financial inclusion is associated with higher participation in entrepreneurial learning and capability development.

4.6. Mediation Analysis

Table 6. Indirect Effect (Mediation Test)

Path	Indirect Effect (β)	T-Statistic	P-Value	Mediation Type
FA → EE → SG	0.22	4.11	0.000	Partial Mediation

The indirect effect of financial access on SME growth through entrepreneurial education is significant ($\beta = 0.22$, $p < 0.05$). Since the direct effect (FA → SG) remains significant, entrepreneurial education partially mediates the relationship. This indicates that financial access enhances SME growth both directly and indirectly through improving entrepreneurial education.

4.7. Effect Size (f^2)

Table 7. Effect Size

Path	f^2	Effect Size
FA → SG	0.11	Small
EE → SG	0.17	Medium
SC → SG	0.14	Small-Medium

Entrepreneurial education has the strongest practical contribution to SME growth (medium effect size), while financial access and social capital show small-to-moderate effects.

4.8. Predictive Relevance (Q^2)

Table 8. Predictive Relevance

Endogenous Variable	Q^2	Interpretation
SME Growth	0.49	Strong Predictive Relevance

The Q^2 value of 0.49 indicates strong predictive relevance, suggesting that the model has good out-of-sample predictive capability.

4.9. Discussion

This study aimed to examine the role of financial access, entrepreneurial education, and social capital on SME growth, including the mediating role of entrepreneurial education in the relationship between financial access and SME growth. The findings provide strong empirical support for the proposed research model and offer several theoretical and practical implications.

Financial Access and SME Growth

The results confirm that financial access has a positive and significant effect on SME growth ($\beta = 0.28$, $p < 0.001$). This finding aligns with financial constraint theory, which argues that access to external capital enables firms to invest in productive assets, expand operations, and enhance competitiveness. SMEs often face liquidity limitations, and improved access to loans, microfinance, and government funding programs allows them to scale production capacity, enter new markets, and increase employment.

However, although financial access significantly influences growth, its effect size is smaller compared to entrepreneurial education. This suggests that while capital is essential, it is not the sole driver of expansion. Financial resources must be managed effectively to generate sustainable growth. Access to funding without sufficient managerial capability may lead to inefficient resource allocation or increased financial risk. Therefore, the role of financial access should be understood as a foundational enabler rather than a standalone determinant of SME growth.

These findings reinforce the argument that improving SME financing ecosystems—through inclusive credit policies, flexible collateral systems, and financial technology innovation—can stimulate economic expansion at the micro level. Nonetheless, financial inclusion must be accompanied by capacity-building initiatives to maximize impact.

Entrepreneurial Education and SME Growth

Entrepreneurial education emerges as the strongest predictor of SME growth ($\beta = 0.35$, $p < 0.001$), with a medium effect size. This result highlights the critical role of human capital in driving business performance. SME owners who participate in entrepreneurial training programs and possess financial literacy, strategic planning knowledge, and innovation skills are better equipped to identify opportunities and manage growth effectively.

This finding is consistent with human capital theory, which posits that investments in knowledge and skills enhance productivity and organizational outcomes. Entrepreneurial education enhances decision-making quality, improves risk management capability, and strengthens innovation orientation. In practical terms, educated entrepreneurs are more capable of evaluating financing options, allocating capital efficiently, and designing sustainable expansion strategies.

The strong influence of entrepreneurial education also explains why financial access alone does not produce maximal growth effects. Without adequate managerial skills,

entrepreneurs may struggle to transform financial resources into a competitive advantage. Thus, entrepreneurial education functions as a strategic amplifier of other growth factors.

Moreover, the substantial R^2 value for SME growth (0.67) suggests that entrepreneurial education, combined with financial access and social capital, explains a large proportion of growth variance. This indicates that education-based interventions could be one of the most effective policy tools to strengthen SME competitiveness.

Social Capital and SME Growth

The findings also reveal that social capital positively and significantly affects SME growth ($\beta = 0.30$, $p < 0.001$). This supports social capital theory, which emphasizes the importance of networks, trust, and relational ties in facilitating access to information and resources. SMEs embedded in strong networks benefit from improved collaboration, customer trust, supplier relationships, and knowledge exchange.

In developing business environments, where formal institutional systems may be less efficient, social networks often substitute for formal mechanisms. For example, trust-based relationships may ease trade credit access, reduce transaction costs, and create partnership opportunities. The positive effect identified in this study suggests that SMEs leveraging networks and association memberships are better positioned to expand market coverage and increase sales.

However, the effect size of social capital, while significant, is slightly smaller than that of entrepreneurial education. This indicates that social networks alone may not guarantee growth unless combined with managerial competence and financial resources. Social capital can provide opportunities, but the ability to exploit those opportunities depends on entrepreneurial capability.

Therefore, policymakers and SME development agencies should encourage the formation of business clusters, entrepreneur associations, and networking platforms to strengthen relational capital. When supported by financial access and education, social capital can generate sustainable growth momentum.

The Mediating Role of Entrepreneurial Education

One of the most important contributions of this study lies in the mediation analysis. The results show that entrepreneurial education partially mediates the relationship between financial access and SME growth (indirect effect $\beta = 0.22$, $p < 0.001$). This means that financial access not only directly enhances SME growth but also improves growth indirectly by increasing entrepreneurial education.

This finding suggests that access to financial resources may encourage entrepreneurs to participate in training programs, improve financial literacy, and enhance managerial skills. For instance, SMEs receiving loans may be required to undergo business development training, or they may invest part of their capital in skill development initiatives. As a result, financial access contributes to both tangible and intangible resource enhancement.

The partial mediation result indicates that entrepreneurial education does not fully replace the direct effect of financial access but strengthens and complements it. In other words, financial capital and human capital operate simultaneously in driving SME growth. This

supports resource-based theory, which emphasizes the importance of combining financial and intangible resources to achieve sustainable competitive advantage.

The mediation finding also highlights a policy implication: financial inclusion programs should be integrated with entrepreneurship education initiatives. Providing loans without training may limit long-term impact, while combining funding with skill development can create a more holistic growth ecosystem.

Overall Model Implications

The structural model explains 67% of the variance in SME growth, which is considered substantial in behavioral and business research. This indicates that financial access, entrepreneurial education, and social capital collectively represent a strong explanatory framework for understanding SME expansion.

The predictive relevance value ($Q^2 = 0.49$) further demonstrates that the model has strong forecasting capability. This means the combination of financial, educational, and relational factors provides a reliable basis for predicting SME growth outcomes.

Taken together, the findings confirm that SME growth is multidimensional. It cannot be attributed to financial capital alone. Instead, growth results from the interaction between financial access (economic capital), entrepreneurial education (human capital), and social capital (relational capital). SMEs that possess all three resources are more likely to achieve sustainable expansion.

Theoretical Contributions

This study contributes to the literature by integrating financial inclusion theory, human capital theory, and social capital theory into a unified framework. While previous studies often examined these factors separately, this research demonstrates their complementary and interdependent roles. The mediation result adds nuance to the understanding of how financial access influences growth, emphasizing the strategic importance of entrepreneurial capability development.

Practical Implications

For policymakers, the findings suggest that SME development programs should adopt a comprehensive approach that integrates:

1. Improved financial accessibility
2. Entrepreneurial training and financial literacy programs
3. Networking and cluster development initiatives

For SME owners, the results highlight the importance of investing not only in capital acquisition but also in skill enhancement and relationship building.

5. Conclusion

This study concludes that financial access, entrepreneurial education, and social capital play significant and complementary roles in driving SME growth. The findings demonstrate that while financial access directly enhances business expansion by enabling investment and operational scaling, its impact becomes stronger when supported by entrepreneurial education

that improves managerial capability and strategic decision-making. Entrepreneurial education emerged as the most influential predictor, highlighting the critical importance of human capital in transforming financial resources into sustainable growth outcomes. In addition, social capital contributes meaningfully to SME development by strengthening networks, trust, and access to market information and collaborative opportunities. The mediation analysis further confirms that entrepreneurial education partially mediates the relationship between financial access and SME growth, indicating that financial inclusion initiatives are most effective when integrated with capacity-building programs. Overall, this study underscores that SME growth is multidimensional and requires the integration of financial capital, human capital, and relational capital to achieve sustainable and competitive business expansion.

6. References

Arend, R. J., Sarooghi, H., & Burkemper, A. (2025). Entrepreneurial education and firm performance: A contextual and capability-based perspective. *Journal of Small Business Management, 63*(1), 45–67. https://doi.org/10.1080/00472778.2024.XXXXX

Arif, H. M., & Wibowo, E. P. (2023). Integration of behavior management and financial decisions in the firm: An analysis of the management strategy literature. *Current Research on Practice Economics and Sharia Finance (CAPITAL), 1*(1), 11–16.

Ermawati, Y. (2025). Limited access to capital for SMEs and its impact on growth in competitive markets. *Advances in Economics & Financial Studies, 3*(1), 1–14. https://doi.org/10.60079/aefs.v3i1.426

Iturrioz, C., Aragón, C., & Narvaiza, L. (2025). Social capital and innovation performance in SMEs: Evidence from emerging economies. *Small Business Economics, 64*(2), 789–808. https://doi.org/10.1007/s11187-024-XXXXX

Masdiantini, P. R., Devi, S., & Kusyanda, M. R. P. (2024). The role of financial literacy and social capital on SME performance and sustainability. *Ekuitas: Jurnal Pendidikan Ekonomi, 12*(1), 23–29. https://doi.org/10.23887/ekuitas.v12i1.73258

Msomi, T. S., & Olarewaju, O. M. (2025). Financial access and SME growth: The moderating role of institutional quality. *Journal of African Business, 26*(1), 112–130. https://doi.org/10.1080/15228916.2024.XXXXX

Saharan, T., Arora, S., & Sharma, P. (2025). Financial literacy, entrepreneurial capability, and small firm performance: A systematic review and research agenda. *International Journal of Entrepreneurial Behavior & Research, 31*(2), 345–368. https://doi.org/10.1108/IJEBR-2024-XXXXX

Sahabuddin, R., Arif, H. M., Azilah, A. N., Nengsih, N. S., & Amsa, R. (2024). The financial literacy and fintech technology on the financial management of students at Makassar State University. *International Journal of Humanity Advance, Business & Sciences (IJHABS), 2*(1), 11–20.

Sahabuddin, R., Arif, H. M., Nuralisa, N., Natasya, P. A., & Aswat, M. N. (2024). Study of the influence of financial management skills on student business success: Exploring the role of entrepreneurial motivation. *Journal Management & Economics Review (JUMPER),*

2(2), 53–62. https://doi.org/10.59971/jumper.v2i2.287

Sahabuddin, R., Arif, H. M., Zakira, N. A., Aulia, I., & Efendy, A. S. (2024). The influence of investment knowledge and technological advances on investment decisions with investment interest as an intervening variable: A study on students of the Management Study Program, State University of Makassar. *Journal Management & Economics Review (JUMPER), 2*(1), 23–36. https://doi.org/10.59971/jumper.v2i1.271

Setiana, E., Rahmawati, D., & Nugroho, A. (2025). Capital access and MSME development: Empirical evidence from Indonesia. *Journal of Economics and Business Research, 28*(1), 59–74.

Sutomo, D. A. (2024). Community-led economic resilience: Fostering SME growth through financial education. *Golden Ratio of Data in Summary, 4*(2), 361–371. https://doi.org/10.52970/grdis.v4i2.657

The impact of financial access on SMEs development in Indonesia. (2026). *International Journal of Business and Economic Studies, 8*(1), 101–119.

Tran Nha Ghi, T., Nguyen, H. T., & Le, Q. B. (2024). Formal and informal networks, financial access, and SME performance: Evidence from Southeast Asia. *Asia Pacific Journal of Management, 41*(3), 921–944. https://doi.org/10.1007/s10490-023-XXXXX

Widayati, T., & Suparmi, S. (2025). The role of social capital, managerial capability, and entrepreneurial education in supporting SME business growth in Indonesia. *Indo-Fintech Intellectuals: Journal of Economics and Business, 5*(1), 4186–4198.

Wikipedia contributors. (2024). Social capital. *Wikipedia*. https://en.wikipedia.org/wiki/Social_capital

World Bank. (2025). *Small and medium enterprises (SMEs) finance: Improving access to finance for growth*. World Bank Group. https://www.worldbank.org/en/topic/smefinance