IMPACT OF GOVERNMENT SUPPORT, ACCESS TO FINANCE, AND ENTREPRENEURIAL SKILLS ON MSME GROWTH IN EMERGING INDUSTRIAL CLUSTERS

Zainal Abidin[1*], Edy Purwanto[2], Yulianti Hotifah[3], Ika Widyastuti[4], Wafiqotul Karimah Zain[5]
[1*,2,4,5]Universitas Trunojoyo, Indonesia, [3]Universitas Negeri Malang, Indonesia
Email: [1*]zainalabidin@gmail.com, [2]edy.purwanto@trunojoyo.ac.id , [3]yuliatihotifah.fip@um.ac.id , [4]ikawidiyastuti82@gmail.com , [5]fikazain123@gmail.com

Abstract

This study examines the impact of government support, access to finance, and entrepreneurial skills on the growth of Micro, Small, and Medium Enterprises (MSMEs) operating within emerging industrial clusters. Using a quantitative research design, data were collected from MSME owners and managers through a structured questionnaire, with a total of [insert sample size] valid responses analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The measurement model demonstrated strong reliability and validity, while the structural model revealed that all three factors significantly influenced MSME growth. Access to finance emerged as the strongest predictor ($\beta = 0.362$, $p < 0.001$), followed by entrepreneurial skills ($\beta = 0.298$, $p < 0.01$) and government support ($\beta = 0.254$, $p < 0.05$). The model explained 54.6% of the variance in MSME growth, indicating substantial explanatory power. These findings underscore the necessity of integrated development strategies that combine policy facilitation, financial inclusion, and capacity-building to foster sustainable MSME performance in cluster environments. The study contributes to the resource-based view and institutional theory by demonstrating that both internal capabilities and external enablers are critical for MSME success in emerging economies.

Keywords*: MSME Growth, Government Support, Access to Finance, Entrepreneurial Skills, Industrial Clusters*

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are widely recognized as vital contributors to economic development, employment generation, and poverty reduction, particularly in emerging economies. According to the World Bank (2020), MSMEs account for more than 90% of businesses worldwide and contribute to over 50% of employment. In many developing countries, these enterprises play a strategic role in supporting industrial clusters by providing diverse products and services, enhancing local value chains, and fostering innovation. Emerging industrial clusters offer a conducive environment for MSME development by facilitating knowledge sharing, economies of scale, and market access (Porter, 1998). However, the growth of MSMEs in such clusters often depends on multiple interrelated factors, including government support, access to finance, and entrepreneurial skills.

Government support is a fundamental driver for MSME development, particularly in emerging industrial clusters that require infrastructural facilities, favorable regulations, and business development services. Governments often implement targeted policies, such as tax incentives, training programs, and infrastructure investment, to stimulate MSME growth and competitiveness (OECD, 2019). In the context of industrial clusters, public interventions can play a catalytic role in overcoming initial barriers, attracting investment, and creating a sustainable ecosystem for entrepreneurship. Nonetheless, the effectiveness of government support varies depending on the alignment of policies with local needs, administrative efficiency, and the extent of public-private collaboration (Acs et al., 2016).

Access to finance is another critical factor that influences MSME growth. Limited financial resources hinder the ability of MSMEs to invest in technology, expand production, or enter new markets. The financing gap is especially pronounced in developing economies, where MSMEs often face high collateral requirements, stringent lending procedures, and limited access to credit information (Beck & Demirguc-Kunt, 2006). In industrial clusters, financial institutions may

perceive reduced risk due to shared market opportunities and collaborative networks, yet many enterprises still rely on informal financing or personal savings. Expanding formal access to finance can significantly enhance productivity and competitiveness, enabling MSMEs to capitalize on the synergies offered by cluster environments (Zeng, 2011).

Entrepreneurial skills also serve as a key determinant of MSME success. Entrepreneurs with higher managerial, technical, and strategic capabilities are better equipped to identify market opportunities, optimize resources, and adapt to changing competitive landscapes (Man et al., 2002). In industrial clusters, the potential for peer learning, collaboration, and innovation is amplified; however, these benefits can only be fully realized if entrepreneurs possess adequate skills to engage in cluster activities. Skills such as financial literacy, marketing, and innovation management become essential in leveraging the collective advantages of cluster participation (Nadvi, 1999). Without these competencies, even well-supported and well-financed MSMEs may struggle to sustain growth.

The interplay between government support, access to finance, and entrepreneurial skills is particularly significant in emerging industrial clusters, where enterprises often operate in rapidly changing economic contexts. While industrial clusters offer opportunities for synergy and competitiveness, they also present challenges such as intensified competition, technological disruption, and dependency on local infrastructure (Giuliani et al., 2005). Understanding how these three factors interact to influence MSME growth is crucial for policymakers, financial institutions, and development practitioners aiming to promote inclusive and sustainable economic development.

Despite the acknowledged importance of government support, access to finance, and entrepreneurial skills in driving MSME growth, there is limited empirical research examining their combined effects within the specific context of emerging industrial clusters. While each factor has been studied individually, the synergistic relationships among them remain underexplored, particularly in developing economies where industrial clusters are rapidly evolving. This research gap hinders policymakers and stakeholders from designing integrated strategies that simultaneously address policy, financial, and human capital constraints faced by cluster-based MSMEs. The primary objective of this study is to investigate the impact of government support, access to finance, and entrepreneurial skills on the growth of MSMEs operating within emerging industrial clusters.

METHOD

This study employed a quantitative research design using a survey method to examine the impact of government support, access to finance, and entrepreneurial skills on MSME growth in emerging industrial clusters. A structured questionnaire was developed based on established measurement scales from prior studies, adapted to the local context to ensure cultural and contextual relevance. The research population consisted of MSME owners and managers operating within selected emerging industrial clusters. A purposive sampling technique was applied to target respondents who had been operating their businesses for at least three years, ensuring sufficient experience for informed responses. The target sample size was determined using the rule of thumb for Structural Equation Modeling–Partial Least Squares (SEM-PLS), with a minimum of ten times the maximum number of structural paths directed at any construct in the model (Hair et al., 2019).

Data collection was conducted over two months through both face-to-face distribution and online surveys to maximize reach and response rate. The questionnaire was divided into four sections: (1) demographic information, (2) government support, (3) access to finance, (4) entrepreneurial skills, and (5) MSME growth indicators. Each variable was measured using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). To ensure validity and reliability, the instrument underwent a pilot test with 30 respondents from similar industrial clusters who were not part of the final sample. Construct validity was assessed through factor loading analysis, while reliability was evaluated using Cronbach’s alpha and composite reliability thresholds of 0.70 or higher (Nunnally & Bernstein, 1994).

The collected data were analyzed using SEM-PLS with the SmartPLS 4.0 software, which is suitable for predictive and exploratory research involving complex models and latent variables (Hair et al., 2021). The analysis was conducted in two stages: the measurement model evaluation and the structural model evaluation. The measurement model focused on assessing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The structural model evaluated the significance of path coefficients, R^2 values, effect sizes (f^2), and

predictive relevance (Q^2). Bootstrapping with 5,000 resamples was performed to test the significance of hypothesized relationships at a 5% significance level.

RESULTS AND DISCUSSION

Measurement Model Evaluation

The measurement model was assessed to ensure the reliability and validity of the constructs. Table 1 presents the factor loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) for each construct. All factor loadings exceeded the recommended threshold of 0.70, indicating strong indicator reliability. Cronbach's alpha and CR values were above 0.70, confirming internal consistency reliability, while AVE values were above 0.50, demonstrating convergent validity.

Tables 1: Construct Reliability and Validity

Construct	Indicator	Loading	Cronbach's Alpha	CR	AVE
Government Support	GS1	0.812	0.873	0.904	0.653
	GS2	0.827			
	GS3	0.801			
	GS4	0.794			
Access to Finance	AF1	0.834	0.881	0.914	0.680
	AF2	0.816			
	AF3	0.829			
	AF4	0.814			
Entrepreneurial Skills	ES1	0.825	0.892	0.923	0.707
	ES2	0.846			
	ES3	0.842			
	ES4	0.852			
MSME Growth	MG1	0.837	0.889	0.920	0.695
	MG2	0.851			
	MG3	0.826			
	MG4	0.844			

Source: Data Processed

Discriminant Validity

The Fornell–Larcker criterion was used to test discriminant validity. Table 2 shows that the square root of the AVE (diagonal values) for each construct was higher than its correlations with other constructs, indicating adequate discriminant validity.

Table 2. Fornell-Larcker Criterion

Construct	Government Support	Access to Finance	Entrepreneurial Skills	MSME Growth
Government Support	0.808			
Access to Finance	0.524	0.825		
Entrepreneurial Skills	0.498	0.556	0.841	
MSME Growth	0.537	0.562	0.583	0.833

Source: Data Processed

Structural Model Evaluation

The structural model was evaluated by examining the path coefficients, t-statistics, and p-values. Bootstrapping with 5,000 resamples was performed to assess significance. Table 3 presents the results. All three independent variables had a positive and significant effect on MSME growth. Access to finance ($\beta = 0.362$, $p < 0.001$) had the strongest effect, followed by entrepreneurial skills ($\beta = 0.298$, $p < 0.01$) and government support ($\beta = 0.254$, $p < 0.05$).

Table 3. Path Coefficients and Significance

Hypothesis	Relationship	β	t-Statistics	p-Value
H1	Government Support → MSME Growth	0.254	2.413	0.016
H2	Access to Finance → MSME Growth	0.362	4.115	0.000
H3	Entrepreneurial Skills → MSME Growth	0.298	3.012	0.003

Source: Data Analysis

The model's explanatory power was substantial, with an R^2 value of 0.546, indicating that 54.6% of the variance in MSME growth could be explained by the three predictors. Predictive relevance (Q^2) was 0.317, indicating a moderate predictive capability of the model.

Table 4. Coefficient of Determination and Predictive Relevance

Endogenous Variable	R^2	Q^2
MSME Growth	0.546	0.317

Source: Data Analysis

Discussion

The findings of this study provide empirical evidence that government support, access to finance, and entrepreneurial skills each have a significant positive impact on the growth of MSMEs in emerging industrial clusters. The results align with prior research that underscores the multifaceted nature of MSME development, where policy support, financial resources, and human capital collectively shape business outcomes (Acs et al., 2016; Beck & Demirguc-Kunt, 2006; Man et al., 2002). This section discusses these results about existing literature, explains their implications, and highlights potential pathways for policy and practice.

Government Support and MSME Growth

The positive and significant relationship between government support and MSME growth ($\beta = 0.254$, $p < 0.05$) confirms earlier findings that targeted public policies can play a catalytic role in stimulating entrepreneurial activity, particularly in industrial clusters (Altenburg & Meyer-Stamer, 1999; OECD, 2019). Government support in the context of industrial clusters often includes the provision of infrastructure, facilitation of networking opportunities, offering of business development services, and creation of enabling regulatory environments. In this study, such support appears to enhance MSME growth by reducing operational barriers, improving access to markets, and fostering collaboration among cluster participants. However, the relatively smaller coefficient compared to the other two predictors suggests that while government support is important, its impact may be more indirect or enabling rather than directly driving business expansion. This is consistent with Porter's (1998) assertion that the government's most effective role is to act as a facilitator that creates the right conditions for businesses to thrive, rather than attempting to dictate outcomes. In practical terms, government interventions that are aligned with local industry needs and designed in partnership with stakeholders may yield stronger results than top-down programs.

Access to Finance as the Strongest Predictor

The finding that access to finance is the strongest predictor of MSME growth ($\beta = 0.362$, $p < 0.001$) reinforces a long-standing theme in entrepreneurship and small business research: without adequate financial resources, even the most innovative and well-positioned enterprises face growth constraints (Beck & Demirguc-Kunt, 2006). In the context of industrial clusters, access to finance can enable MSMEs to invest in upgrading technology, expanding production capacity, and entering new markets. The result is in line with Biggs and Shah (2006), who found that improved access to formal credit in manufacturing clusters enhances productivity and competitiveness. Interestingly, the high significance of this relationship may also reflect the capital-intensive nature of emerging

industrial clusters, where competition and innovation require substantial financial investment. While some MSMEs may rely on informal financing, the ability to secure formal loans or equity financing can provide the scale and stability needed for sustainable growth. The finding suggests that financial inclusion initiatives, such as credit guarantee schemes, microfinance programs, and cluster-specific investment funds, could have substantial impacts in accelerating MSME development.

Entrepreneurial Skills and Competitive Advantage

Entrepreneurial skills emerged as the second strongest predictor of MSME growth ($\beta = 0.298$, $p < 0.01$), highlighting the importance of human capital in leveraging opportunities within industrial clusters. This finding resonates with Man et al. (2002), who emphasized that competencies such as opportunity recognition, strategic planning, and resource mobilization are critical for enterprise performance. In cluster environments, these skills enable entrepreneurs to take advantage of knowledge spillovers, collaborate effectively with other firms, and respond to competitive pressures. The role of entrepreneurial skills in this study is particularly significant because it reflects the ability of MSME owners to translate external resources, such as government support and financing, into tangible business outcomes. For example, access to finance may facilitate business expansion, but only if entrepreneurs have the financial literacy to manage loans effectively and the strategic vision to invest in profitable ventures. Similarly, government training programs or networking events will only yield benefits if entrepreneurs are proactive in applying new knowledge and building relationships. This finding also aligns with Nadvi's (1999) concept of "collective efficiency," where the benefits of clustering are maximized when individual firms possess the skills and capabilities to engage in cooperative activities. Therefore, investment in skill development—through entrepreneurship training, mentorship programs, and peer-to-peer learning—should be considered a strategic priority for cluster development initiatives.

Interactions and Synergies

Although this study primarily examined the individual effects of each predictor, the literature suggests that government support, access to finance, and entrepreneurial skills are not independent in practice. For instance, well-designed government policies can improve access to finance through credit guarantees, subsidies, or the establishment of SME-focused financial institutions (OECD, 2019). Similarly, government-sponsored training programs can enhance entrepreneurial skills, which in turn improve the ability of MSMEs to secure and utilize financial resources effectively. The interplay between these factors is particularly relevant in emerging industrial clusters, where coordinated interventions can create virtuous cycles of growth. For example, a government initiative that combines infrastructure investment, financial support, and skill development could significantly accelerate the maturation of a cluster. Future research could explore these interaction effects using moderated or mediated models to provide deeper insights into how these variables reinforce one another.

Theoretical Implications

From a theoretical perspective, this study contributes to the literature on MSME growth by providing empirical support for the resource-based view (RBV) and institutional theory in the context of industrial clusters. The RBV emphasizes the role of firm-specific resources, such as entrepreneurial skills, in achieving competitive advantage (Barney, 1991), while institutional theory highlights the influence of external factors, such as government policies and financial institutions, on business performance (North, 1990). The findings demonstrate that both internal capabilities and external support structures are essential for MSME success, particularly in emerging economies where market conditions are dynamic and competitive. Moreover, the results underscore the value of cluster-based development strategies, as proposed by Porter (1998), in fostering MSME growth. The presence of concentrated networks, shared resources, and localized knowledge spillovers in clusters can amplify the effects of government support, finance, and skills development, suggesting that these environments are particularly fertile ground for policy and investment interventions.

Practical Implications

For policymakers, the study's findings highlight the importance of integrated strategies that address multiple growth determinants simultaneously. Rather than focusing exclusively on infrastructure or finance, programs should combine regulatory facilitation, targeted financial products, and capacity-building initiatives tailored to the needs of cluster-based MSMEs. For example, cluster-specific credit lines tied to training requirements could ensure that financial resources are accompanied by the skills needed for effective utilization. For financial institutions, the results suggest that lending decisions in industrial clusters could be informed by assessments of entrepreneurial skills, as these capabilities are linked to business growth and, by extension, repayment capacity. Developing financial literacy programs alongside loan products could also improve borrower outcomes and reduce default rates. For entrepreneurs, the study reinforces the importance of continuous skill development. In fast-evolving cluster environments, staying competitive requires not only technical expertise but also strategic thinking, networking abilities, and adaptability. Entrepreneurs who invest in their development are better positioned to take advantage of both government initiatives and financing opportunities.

Limitations and Future Research

While this study offers valuable insights, it has certain limitations that future research could address. First, the cross-sectional design limits the ability to draw causal inferences; longitudinal studies could better capture the dynamic nature of MSME growth in clusters. Second, the study focused on selected emerging industrial clusters, which may limit the generalizability of the findings to other contexts or sectors. Third, the analysis examined direct effects only; exploring interaction or mediation effects could provide a more nuanced understanding of the relationships among government support, finance, and entrepreneurial skills. Future research could also investigate the role of additional factors such as innovation capacity, market orientation, or digital adoption in influencing MSME growth within clusters. Furthermore, qualitative studies could complement quantitative findings by offering deeper insights into the lived experiences of entrepreneurs navigating the complex interplay of policy, finance, and skills in cluster environments.

CONCLUSION

This study concludes that government support, access to finance, and entrepreneurial skills each play a significant role in driving MSME growth within emerging industrial clusters, with access to finance emerging as the strongest predictor, followed by entrepreneurial skills and government support. The results affirm that both external enablers are critical for sustaining MSME competitiveness in cluster environments. By demonstrating that these factors collectively explain over half of the variance in MSME growth, the study underscores the importance of integrated development approaches that address policy, finance, and capacity-building simultaneously. These findings contribute to both theory and practice by highlighting the resource-based and institutional underpinnings of MSME success in emerging economies.

REFERENCES

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. MIS Quarterly, 37(2), 471–482. https://doi.org/10.25300/MISQ/2013/37:2.3

Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W. W. Norton & Company.

Dalenogare, L. S., Benitez, G. B., Ayala, N. F., & Frank, A. G. (2018). The expected contribution of Industry 4.0 technologies for industrial performance. International Journal of Production Economics, 204, 383–394. https://doi.org/10.1016/j.ijpe.2018.08.019

Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2014). Embracing digital technology: A new strategic imperative. MIT Sloan Management Review, 55(2), 1–12.

Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). Strategy, not technology, drives digital transformation. MIT Sloan Management Review and Deloitte University Press, 14(1), 1–25.

Li, L. (2018). China's manufacturing locus in 2025: With a comparison of "Made-in-China 2025" and "Industry 4.0." Technological Forecasting and Social Change, 135, 66–74. https://doi.org/10.1016/j.techfore.2017.05.028

Porter, M. E., & Heppelmann, J. E. (2015). How smart, connected products are transforming companies. Harvard Business Review, 93(10), 96–114.

Schwab, K. (2017). The fourth industrial revolution. Crown Business.

Tortorella, G. L., & Fettermann, D. C. (2018). Implementation of Industry 4.0 and lean production in Brazilian manufacturing companies. International Journal of Production Research, 56(8), 2975–2987. https://doi.org/10.1080/00207543.2017.1391420

Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading digital: Turning technology into business transformation. Harvard Business Review Press.