
The Role Of Financial Literacy, Financial Inclusion In The Sustainability Of Msmes By Mediation Of Msme Performance In Msmes In Karangpandan District, Karanganyar Regency

Sarsiti Sarsiti

Doktor Ilmu Ekonomi, Fakultas Ekonomi dan Bisnis, Universitas 17
Agustus 1945 Surabaya

E-mail: sitiunsa76@gmail.com

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Abstract

This research aims to analyze the role of financial literacy and financial inclusion on the performance and sustainability of Micro, Small and Medium Enterprises (MSMEs) in Karangpandan District, Karanganyar Regency. Financial literacy and financial inclusion are two important aspects which are believed to be able to increase the competitiveness and resilience of MSMEs in facing economic dynamics, especially after the pandemic and amidst the acceleration of financial digitalization. This research uses a quantitative approach with survey methods. The research sample consisted of 120 MSME actors selected using purposive sampling techniques. The data collection instrument was a structured questionnaire, data analysis was carried out using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The research results show that financial literacy has a positive and significant effect on the performance of MSMEs, while financial inclusion has a significant effect on the sustainability of MSMEs. Apart from that, the performance of MSMEs has also proven to be an important mediator in the relationship between literacy and financial inclusion on business sustainability. The results of this research state the importance of increasing literacy programs and more inclusive access to formal financial services as a strategy to strengthen MSMEs at the local level.

Keywords: *Financial Literacy, Financial Inclusion, MSME Performance, MSME Sustainability*

INTRODUCTION

MSMEs are considered a pillar of economic growth in many developed and developing countries around the world. In countries with high incomes, this sector contributes around 55 percent of Gross Domestic Product (GDP) and 65 percent of employment opportunities. Meanwhile, in middle-income countries, MSMEs contribute around 70 percent of GDP and 95 percent of the total employment, and in low-income countries, MSEs contribute 60 percent of GDP and around 70 percent of total employment (Anshika, 2020). In Indonesia, MSMEs are contribution to the national economy (GDP) amounting to 61.1%, and able to

absorb energy the work of 117 million workers or 97%. Therefore, MSEs play a role as a catalyst in stimulating economic growth and providing employment opportunities for vulnerable groups such as women, young entrepreneurs and the poor.

BPS, 2024 states that the total number of industries in Karanganyar district will reach 8,383 business units. The details are 59 large industries, 7,138 small industries and 1,186 home industries. Absorbing 17,738 workers for large industries, 1,395 for home industries. and 36,493 in small industries. Small industry grows most in Karangpandan District (*Espos.id*, 2024). Although the number of MSMEs is increasing, this sector is still facing internal challenges regarding access to financing. Around 46.6 million MSMEs still do not have one access to capital from financial institutions (Yusup, 2024). In line with the head of Bappenas, Suharso Monoarfa, there are five problems with micro, small and medium enterprises (MSMEs) in the country, one of which is that access to financing for MSMEs is still low. This refers to data from the Ministry of Cooperatives and SMEs in 2019, 88 percent of MSEs did not obtain or apply for credit (Sarsiti, 2024)

According to Septiani & Wuryani, (2020) that people do not have banking services because they lack financial literacy (financial inclusion) and literature shows that inadequate financial literacy is the main reason that prevents MSMEs from obtaining financial resources from financial institutions and investors which causes business failure (Karadag, 2015). Financial literacy is one of the government's focuses in creating welfare of society in Indonesia. The government is of the view that through financial literacy, financial system stability, community welfare and inclusive development can be more easily achieved. This is what then encouraged the Government of the Republic of Indonesia to form the National Strategy for Indonesian Financial Literacy (SNLKI) since 2013 (Tangga, 2020); (*Information Technology Literacy and Intention To Use Fintech In*, 2024).

The 2024 SNLIK results show the population's financial literacy index Indonesia was 65.43 percent, while the financial inclusion index was 75.02 percent (OJK, 2024). Fatonah et al. 2024 states that mThe community in Karanganyar Regency according to BPS (2023) has a literacy development index of 66.57%, so there are still around 33.43% of Karanganyar Regency residents who do not understand financial literacy. One of the efforts made by the community in Karangpandan District is the existence of programs namely "Karang Menabung", "Reliable MSMEs" which can provide literacy support, capital strengthening and digital financial management to village MSMEs (Cahyono, 2024).

Financial literacy and inclusion have highlighted the role of on business performance, but not many have simultaneously studied both in relation to business sustainability, especially in rural MSME context such as in Karangpandan. The study by Widayati et al. (2023) only highlights the influence of literacy on performance without considering aspects of inclusion. Meanwhile, a study by Rizal and Lestari (2021) focused on financial inclusion, but did not

link it to business sustainability. Therefore, this research aims to fill this research gap with a more comprehensive approach. Based on the previous description, the researcher aims to determine the influence of financial literacy on the performance of MSMEs in Karangpandan District, the influence of financial inclusion on the performance of MSMEs in Karangpandan District, the influence of financial literacy on the sustainability of MSMEs in Karangpandan District, the influence of financial inclusion on the sustainability of MSMEs in Karangpandan District, the role of MSME performance as a mediator between literacy and financial inclusion on business sustainability?

METHOD

This research is quantitative research with an explanatory approach, which aims to test the causal relationship between variables. The population in this study were all MSME actors in Karangpandan District, Karanganyar Regency. The sampling technique uses purposive sampling, with the following criteria: MSMEs that have been operating for at least 2 years, have simple financial recording activities. Have ever accessed formal financial services (bank or other financial institution). The sample size was determined based on the formula of Hair et al. (2010), namely a minimum of 5–10 times the number of indicators in the instrument, or using the Slovin formula for limited populations. The data used is primary data obtained from questionnaires distributed to MSME players, and secondary data from literature, government reports and academic journals.

Data Collection Techniques: Closed questionnaire with a Likert scale of 1–5; Interview limited to clarification; Data documentation from the Karanganyar Regency Cooperatives and SMEs Service. The research instrument was tested for validity and reliability before use. Validity test uses item-total correlation analysis, and reliability uses Cronbach's Alpha value (>0.7 is said to be reliable). **Data Analysis Technique:** Descriptive Analysis to describe the characteristics of respondents. Analisis SEM-PLS (Partial Least Squares) used to test the relationship between variables and mediation effects, because the model includes direct and indirect relationships with reflective indicators. Hypothesis testing is carried out by paying attention to the path coefficient and p values value (significance < 0.05).

RESULTS AND DISCUSSION

Description of respondents

A total of 120 MSME actors from Karangpandan District were respondents. General characteristics: 65% women, 35% men, Age 25-45 years (72%), Type of business: food/beverage (40%), crafts (25%), services (20%), others (15%), Business duration >3 years (60%), The majority have never had financial training (70%).

Validity and Reliability Test

a. *Convergent Validity Test*

Using values Average Variance Extracted (AVE) > 0.5

Table 1. Validity Test

Variabel	AVE	Keterangan
Financial Literacy	0.641	Valid
Financial Inclusion	0.693	Valid
MSME Performance	0.702	Valid
MSME Sustainability	0.655	Valid

Source: Processed primary data, 2025

b. *Reliability Test*

Using values Cronbach's Alpha and Composite Reliability (CR)

Table 2. Reliability Test

Variabel	Alpha	CR	Keterangan
Financial Literacy	0.812	0.875	Reliable
Financial Inclusion	0.836	0.889	Reliable
MSME Performance	0.805	0.871	Reliable
MSME Sustainability	0.822	0.884	Reliable

Source: Processed primary data, 2025

Structural Model Test (Inner Model)

a. *Coefficient of Determination (R²)*

Table 3. Coefficient of Determination (R²)

Variabel Endogen	R ²	Description
MSME Performance	0.522	Variable explained 52.2%
MSME Sustainability	0.637	Variable explained 63.7%

Source: Processed primary data, 2025

b. *Uji Predictive Relevance (Q²)*

Q² value > 0 indicates the model has good prediction.

- Q² MSME Performance = 0.417
- Q² MSME Sustainability = 0.536

Hypothesis Testing

Hipotesis	Jalur Pengaruh	Path Coef	t-Statistik	p-Value	Keterangan
H1	Financial Literacy → MSME Performance	0.345	4.12	0.000	Accepted (significant)
H2	Financial Inclusion → MSME Performance	0.403	4.65	0.000	Accepted (significant)
H3	Financial Literacy → MSME Sustainability	0.212	2.13	0.034	Accepted (significant)
H4	Financial Inclusion → MSME Sustainability	0.260	2.44	0.015	Accepted (significant)
H5	MSME Performance → MSME Sustainability	0.421	5.08	0.000	Accepted (significant)
H6	Financial Literacy → MSME Performance → MSME Sustainability	0.145	2.76	0.006	Mediation accepted
H7	Financial Inclusion → MSME Performance → MSME Sustainability	0.170	2.98	0.003	Mediation accepted

Source: Processed primary data, 2025

DISCUSSION

1. The Effect of Financial Literacy on MSME Performance

The results of the analysis show that financial literacy has a positive and significant effect on the performance of MSMEs. These findings strengthen the study (Kusuma et al., 2021) that MSME players' knowledge of banking products means that the work they do is always planned and carried out according to the work program. With financial literacy, mistakes at work or wrong decisions taken by MSMEs in the past will not be repeated. According to (Idawati & Pratama, 2023) financial management is an important aspect to support business performance and growth. Human resources who have good financial literacy skills will carry out optimal financial management to support increased business performance. According to (Ariyanti, 2024) MSME players who understand financial literacy tend to manage their business finances more effectively and efficiently. This can increase profits and business performance, MSME players who understand financial literacy well are often better able to make good financial decisions. This can increase the chances of business success.

According to (Idawati & Pratama, 2020) the success or failure of an MSME business is greatly influenced by the skills and abilities possessed by the business actor and in the business process three types of basic capital are needed that can support the success of the business, namely human resources, social resources and capital resources. One of the categories that is expected to contribute is financial capital, therefore every MSME must pay attention to the level of financial literacy of human resources involved in financial management. According to (Satyawati et al., 2023) in terms of financial literacy, MSME actors need to understand and control business risks well, therefore MSME actors need to understand clearly the importance of insurance for business actors to avoid business financial problems.

2. The Effect of Financial Inclusion on MSME Performance

Financial inclusion also has a significant effect on the performance of MSMEs. Access to formal financial services such as people's business credit (KUR), savings, and digital banking services, increases capital capacity and makes financial transactions more efficient. This is in line with research. According to (Hilmawati & Kusumaningtias, 2021) financial literacy includes knowledge about financial planning and management, financial information and technology, along with knowledge about investment and risk management. In order for a business to develop, it must be supported by superior and high-value resources. The resource that can be used in this case is the financial literacy of economic actors.

According to (Ayu Rumini & Martadiani, 2020) increasing financial literacy demonstrated by having an account in the company's name will increase the sustainability of MSME businesses in Badung Regency as demonstrated by the existence of a customer satisfaction monitoring system. According to (Yunus et al., 2022) the financial literacy of MSME players will help them in managing their business operations and productivity, which in the end will have a big impact on the sustainability of their business, Park & Mercado (2015) that the involvement of MSMEs in the formal financial system can increase productivity.

3. The Influence of Literacy and Inclusion on Business Sustainability

Literacy and financial inclusion not only influence performance, but also directly contribute to the sustainability of MSMEs. Literacy increases the ability of business actors to anticipate financial risks, while inclusion provides space for financing diversification. This supports the study results. (Hilmawati & Kusumaningtias, 2021) which explains that financial literacy has an influence on the performance and sustainability of the MSME sector. According to (Idawati & Pratama, 2023) the higher the level of financial inclusion of MSME players, the better the impact on the sustainability of MSMEs. MSMEs that lack capital will try to get capital support from various parties and try to restructure loans from banking institutions so that MSMEs can continue to operate through these efforts. A good level of financial inclusion among MSMEs makes financial management decision making more effective.

According to (Ariyanti, 2024) Financial inclusion has a positive impact on the sustainability of MSME businesses. This can be caused by several factors, including: MSMEs that have access to formal financial services tend to be able to meet their business needs better. This can be done increasing the competitiveness and sustainability of MSME businesses, MSMEs that have access to formal

financial services tend to develop their businesses better. This can increase the sustainability of MSME businesses. (Sanistasya et al., 2019) financial inclusion has a direct impact on business performance. This positive influence is due to the small business actors who join in the Entrepreneurship Education and Training Group of the KUMKM Business Clinic in East Kalimantan Province, they have benefited from programs and interventions that not only involve financial knowledge and understanding but also support financial skills and competencies that support the financial inclusion of business actors. These factors can be relied upon to encourage behavioral changes so that appropriate financial inclusion can improve the performance of small businesses in East Kalimantan Province.

4. The Mediating Role of Performance on Sustainability

The results show that MSME performance mediates the relationship between literacy and financial inclusion on sustainability. This means that financial literacy and inclusion will only have an optimal impact if it is transformed into good performance first. This supports the sustainability model through increasing productivity and operational efficiency. According to (Yanti, 2019) the performance of MSME businesses will increase significantly if MSME players continue to increase financial inclusion. According to (Joko et al., 2022) the impact of financial inclusion on MSME performance is caused by MSME actors in Pekanbaru City having and using access to finance. The fairly even distribution of financial services such as banking in Pekanbaru City makes it easy for people to access and feel supported by financial services. This proves that the existence of financial services and financial access can facilitate the financial performance of MSMEs so that MSMEs can achieve prosperity. (Endah Finatariansi, Iin Rosini, 2024) that financial literacy has a very big influence on performance through company sustainability, thus company sustainability can play a mediating role in financial literacy on performance.

Performance measurement is a complex construct, especially in the SME sector (Shuaib, 2021) because the business activities of SMEs vary or depend on the activities of SMEs (Yadav, 2014). Manufacturing SMEs must assess their performance regularly in order to remain competitive (Thanki, et al., 2016). Research has shown several performance indicators depending on the activities or businesses of SMEs. SME performance can be measured using company size, company age, skilled workforce, location, type of manufacturing ownership, collaboration and foreign investment (Perwitasari, A.W., 2022)

CONCLUSION

The conclusions of this research are:

1. Financial literacy and inclusion have a significant positive effect on the performance and sustainability of MSMEs.
2. MSME performance also directly influences business sustainability.
3. Performance mediates the relationship between literacy and financial inclusion on sustainability.
4. Increasing financial understanding and access is a strategic key to supporting the resilience and growth of MSMEs

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