# Influence of Financial Literacy on MSME Performance with Financial Inclusion as a Mediation

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#### **ABSTRACT**

The role of Micro, Small, and Medium Enterprises (MSMEs) is very fundamental as a pillar of the Indonesian economy. This study examines the effect of financial literacy on the performance of MSMEs with financial inclusion as a mediating variable conducted on MSMEs in Wero Village. The study focused on 40 MSME actors who were sampled. Questionnaires were given to respondents to obtain accurate data. Data analysis was carried out using the Partial Least Square (PLS) method with SmartPLS 3.0 software. The results of the study showed that financial literacy did not have a positive and significant effect on MSME performance. However, financial literacy has a positive and significant effect on financial inclusion which is then proven to be effective as a mediator in the positive relationship between financial literacy and MSME performance. This study still has limitations, namely only examining MSMEs in Wero Village. So further research is needed so that the findings can be generalized.

Keyword: Financial literacy; Financial inclusion; MSME performance.

JEL Classification: L26; G21; D14.



### INTRODUCTION

The Financial Sector in Indonesia has shifted to using technology development for its products (Rahardjo, et al., 2020). The MSME sector plays a crucial role in a country's economy. Typically, MSMEs are owned and operated by individuals or small groups, and they make significant contributions to economic growth, job creation, and poverty reduction. One characteristic of MSMEs is their relatively small scale in terms of assets, revenue, and number of employees. For example, micro-enterprises are usually managed by one or a few people with limited assets and income. Small enterprises typically have more employees and higher revenues, while medium enterprises operate on a larger scale. The development of micro, small, and medium enterprises (MSMEs) is vital to advancing a country's economy, including Indonesia's. This aligns with the findings of Adomako et al. (2016), which emphasize that one effective way to reduce poverty levels is through job creation by MSMEs. The existence of MSMEs not only opens up job opportunities but also significantly contributes to national economic growth.

MSME entrepreneurs in Wero Village, Gombong District, Kebumen Regency, play an important role in local economic growth (Tambunan, 2018). With a strategic location along the national road and serving as a junction to the main roads leading to Buayan, Kuwarasan, Karanggayam, and Banjarnegara Regency, Wero Village offers attractive business opportunities for entrepreneurs. The MSME sector, especially in the fields of culinary, fashion, beauty, and automotive, continues to thrive in this area. Gombong, which is the second-largest city after Kebumen, covers an area of approximately 29.48 km² with a total population of about 47,870. Thus, MSMEs in Wero Village contribute to the local economy and positively impact the surrounding community.

The annual revenue growth of Micro, Small, and Medium Enterprises (MSMEs) in Kebumen Regency, specifically in Wero Village, Gombong District, over the past 11 years indicates a significant increase in the contribution of the MSME sector to the local economy. Regarding financial literacy, MSME (Micro, Small, and Medium Enterprises) entrepreneurs in Wero Village, Gombong Subdistrict, Kebumen Regency need to understand the importance of good financial management (Atkinson & Messy, 2012). Financial literacy refers to an individual's ability to make effective decisions regarding personal finance. It helps prevent financial problems, especially those caused by mismanagement of finances (Lusardi & Mitchell, 2014).

Meanwhile, financial inclusion is defined as a systematic effort to improve the accessibility and suitability of financial products and services. This aims to ensure wider distribution and utilization among various population segments (Demirgüç-Kunt et al., 2018). To ensure the sustainability of MSMEs, the implementation of continuous innovation concepts and a good understanding of financial management are required (Croitoru, 2012). With the right knowledge, MSME actors can make wise decisions to maintain and grow their businesses.

To understand the impact of financial literacy on the performance of MSMEs in Wero Village, this research aims to identify the effect of financial literacy on the performance of MSMEs, particularly in Wero Village. Financial literacy is a key factor in understanding and managing financial aspects within a business. Basic financial management knowledge can be defined as the understanding of the fundamental principles of personal financial management, which will later be used as a reference for managing personal, family, and business finances (Ariningrum, 2020). A lack of understanding and skills in managing finances can hinder the growth and sustainability of MSMEs.

Various elements influence financial literacy. Hilmawati & Kusumaningtias (2021), who found that financial literacy, as opposed to financial inclusion, significantly affects MSME

performance. However, these results contrast with a study by Resmi et al., (2019), which showed that financial literacy does not have a significant effect on this relationship. Although much research has highlighted the importance of financial literacy and financial inclusion in the MSME context, there is still a lack of understanding of how these factors specifically relate in Wero Village. Therefore, this study seeks to fill the knowledge gap by exploring the relationship between financial literacy, financial inclusion, and MSME performance in more depth.

The main objective of this research is to provide a better understanding of how financial literacy and financial inclusion can influence MSME performance in Wero Village. By considering financial inclusion as a mediator, this research is expected to make a valuable contribution to the development of MSMEs and the promotion of inclusive finance in the area. As such, this research has the potential to offer relevant insights for MSME actors, local governments, and financial institutions in supporting sustainable MSME growth.

#### **METHODS**

This study uses a quantitative method. The population focus is on Micro, Small, and Medium Enterprises (MSMEs) in Wero Village. The population data was obtained from MSMEs in Wero Village, with a sample size of 40 MSMEs. The sampling technique used is non-probability sampling, specifically the purposive sampling method. Primary data was collected through questionnaires from MSME respondents. This primary data includes information about the MSME actors' understanding of financial literacy. The data analysis method applied is Partial Least Square (PLS), which is one of the techniques of Structural Equation Modelling (SEM). PLS allows for the direct analysis of latent variables, indicator variables, and measurement errors. The SEM analysis process is carried out using the SmartPLS 3.0 software, which facilitates model calculations. Evaluation is conducted on the outer model and inner model to ensure the accuracy and reliability of the research results. Financial education is expected to provide a significant contribution to the sustainability of Small and Medium Enterprises (SMEs) which in turn will support the national economy. The hypothesis that can be formulated in Figure 1.

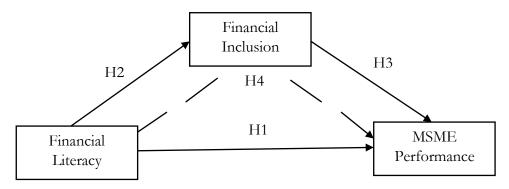


Figure 1. The Relationship Between Variables

H1: Financial Literacy (X) has a positive effect on MSME Performance (Y)

H2: Financial Literacy (X) has a positive effect on Financial Inclusion (Z)

H3: Financial Inclusion (Z) has a positive effect on MSME Performance (Y)

H4: Financial Inclusion (Z), as a mediating variable, has a positive effect on Financial Literacy (X) and MSME Performance (Y)

### RESULT AND DISCUSSION

Based on Table 1, it can be seen that each indicator of the research variable has an outer loading value of more than 0.7. Loading values between 0.5 and 0.6 are already adequate to meet the criteria for convergent validity. The data shows that there are no indicators with outer loading values below 0.5, so it can be concluded that all these indicators are suitable and valid for use in the research and are feasible for further analysis.

Table 1. Outer Loading Values

Variables	Indicators	Outer Loading	
Financial Literacy	X1	0,945	
	X2	0,955	
	X3	0,962	
	X4	0,791	
	X5	0,969	
Financial Inclusion	Z1	0,814	
	Z2	0,808	
	<b>Z</b> 3	0,784	
	$\mathbb{Z}4$	0,831	
	Z5	0,743	
	<b>Z</b> 6	0,741	
MSME Performance	Y1	0,903	
	Y2	0,764	
	Y3	0,849	
	Y4	0,844	
	Y5	0,918	
	Y6	0,829	
	Y7	0,744	

Source: processed research data

Table 2. Fornell-Larcker Criterion

·	Financial	MSME	Financial
	Inclusion	Performance	Literacy
Financial Inclusion	0,788		
MSME Performance	0,622	0,838	
Financial Literacy	0,643	0,477	0,927

Source: processed research data

Based on the analysis results in Table 2, it can be concluded that The correlation value of Financial Inclusion of 0.788 must be greater than the correlation with other constructs. This shows that financial inclusion has a significant influence on this research model.

MSME performance with a correlation value of 0.838, MSME performance must also be greater than the correlation with other constructs. This means that MSME performance plays a very important role in this study. The correlation value of Financial Literacy of 0.927 indicates that financial literacy must be greater than the correlation with other constructs. Financial literacy makes a significant contribution to the research model. So it can be concluded that the three constructs show good discriminant validity and each plays a unique role in influencing the research results regarding the influence of financial literacy on MSME performance with financial inclusion as a mediator. The overall outer model 1 of SmartPLS 3.0 can be seen in Figure 2

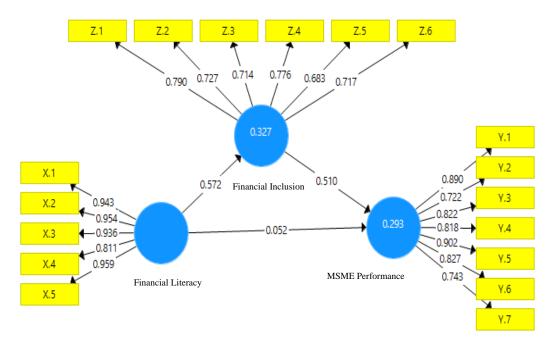


Figure 2. Outer Model 1

**Table 3.** Reliability Test

Variables	Composite Reliability	Cronbach Alpha
Financial Inclusion	0,907	0,880
MSME Performance	0,943	0,929
Financial Literacy	0,968	0,958

Source: processed research data

In this study, the measurement of the reliability of a construct with reflective indicators can be carried out through two main methods: Cronbach's alpha and Composite Reliability, with values above 0.7. Adequate reliability is marked when the Composite Reliability value of the variable exceeds the value of Cronbach's Alpha. Based on Table 3, which presents the results of the reliability test, it can be seen that the Composite Reliability values for each variable are higher than the values of Cronbach's Alpha, and the values of the variables are above 0.7. This indicates that the variables being tested have

reliable measurement properties. Table 3 shows the Cronbach's alpha and Composite Reliability values.

 Table 4. Path Coefficient (Direct Effect)

Variables	Original	Sample	Standard	T	P
	Sample	Mean	Deviation	Statistics	Values
Financial Inclusion → MSME	0,536	0,593	0,150	3,574	0,000
Performance					
Financial Literacy → Financial	0,643	0,664	0,092	6,979	0,000
Inclusion					
Financial Literacy → MSME	0,133	0,087	0,185	0,719	0,472
Performance					

Source: processed research data

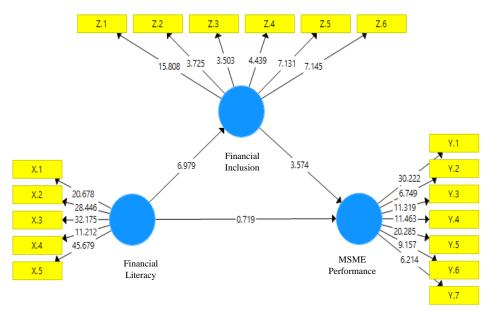


Figure 3. Outer Model 2

Table 5. Indirect Effect Test

Variables	O	•	Standard Deviation		P
Financial Literacy → Financial		0,396	0,129	2,679	0,008
Inclusion → MSME Performance					

Source: processed research data

## The Influence of Financial Literacy on MSME Performance

Research conducted by Dahmen & Rodríguez (2014) and Mani, & Ngigi, (2024) indicated a positive and significant effect of financial literacy on the performance improvement of Micro, Small, and Medium Enterprises (MSMEs). However, recent findings from our

study show that financial literacy does not have a positive or significant impact in the same context. According to the hypothesis test results, the t-statistic value was 0.719, with an effect size of 0.133 and a p-value of 0.472. With a t-statistic value <1.96 and a p-value >0.05, it can be concluded that the first hypothesis is not accepted, indicating a negative and insignificant effect of financial literacy on MSME performance. These findings are consistent with research conducted by Brush, et al., (2002), who argued that the success of MSMEs is not solely determined by financial literacy, but by the capital capacity owned, including social capital, human resources, and financial capital. Furthermore, research conducted by Astrini, & Puspitasari, (2022) supports this view by showing that financial literacy does not have a significant effect on MSME performance, marked by the significance level of the financial literacy variable exceeding 0.05. This is due to the fact that MSME actors lack adequate knowledge of financial literacy, making them unable to make sound business decisions or create effective financial plans to enhance their business capabilities.

## The Influence of Financial Literacy on Financial Inclusion

The second hypothesis tests whether financial literacy has a positive and significant effect on financial inclusion. The table above shows a t-statistic value of 6.979, with an effect size of 0.643 and a p-value of 0.000. With a t-statistic value >1.96 and a p-value <0.05, it can be concluded that the second hypothesis is accepted, indicating a positive and significant effect of financial literacy on financial inclusion. This is supported by research by Khan, et al., (2022), which showed that financial literacy has a significant positive effect on capital structure decisions and financial inclusion. From these results, it can be concluded that as financial literacy increases, it can influence financial inclusion. MSME actors who lack knowledge and experience cannot access financial services optimally. This analysis contradicts previous research conducted by Lusardi & Mitchell (2014), which stated that the results of financial literacy on financial inclusion were insignificant and did not show a positive effect.

## The Influence of Financial Inclusion on MSME Performance

The third hypothesis tests whether financial inclusion has a positive and significant effect on MSME performance. The table above shows a t-statistic value of 3.574, with an effect size of 0.536 and a p-value of 0.000. With a t-statistic value >1.96 and a p-value <0.05, it can be concluded that the third hypothesis is accepted, indicating a positive and significant effect of financial inclusion on MSME performance. This contradicts the findings of Adomako, et al., (2016), which stated that financial inclusion does not affect MSME performance. The results are reinforced by research by Yanti (2019), which showed that financial inclusion has a positive and significant effect on MSME performance decisions. Financial inclusion is an analysis that plays a role in maximizing precise and accurate information. This aims to utilize access to meet the operational needs of MSMEs in various transactions, payments, and more. Thus, from these results, it can be concluded that financial inclusion can influence MSME performance.

# The Influence of Financial Literacy on MSME Performance with Financial Inclusion as a Mediator

This hypothesis tests whether financial inclusion can mediate the positive effect of financial literacy on MSME performance. Based on the table above, the t-statistic value for social capital is 2.679, which means it is >1.96, with a p-value of 0.008, which means it is <0.05. It can be concluded that the financial inclusion variable can mediate the effect of financial literacy on MSME performance. This result is supported by research by Rahadjeng, et al., (2023), which showed that financial literacy has a positive and significant effect on the relationship between financial literacy and MSME performance. MSME actors who utilize and benefit from financial institution services can improve their welfare and minimize risks or obstacles in production operations, which can enhance performance. This also affects the development of MSMEs in strengthening their operations to run smoothly. Thus, it can be concluded that if financial literacy improves, business actors will understand how to access capital sources, and increase sales, profits, and MSME performance.

## **CONCLUSION**

This study aims to determine the effect of financial literacy on the performance of MSMEs with financial inclusion as a mediator, located in Wero Village. Based on the data collected and the analysis that has been carried out, it can be concluded that financial literacy does not have a positive or significant effect on MSME performance, thus the first hypothesis is rejected. Financial literacy has a positive and significant effect on financial inclusion, thus the second hypothesis is accepted. Financial inclusion has a positive and significant effect on MSME performance, thus the third hypothesis is accepted. Financial inclusion mediates the effect of financial literacy on MSME performance, thus the fourth hypothesis is accepted. Further research can add moderating variables such as government support or access to technology to see if these variables strengthen the relationship between financial inclusion and MSME performance. In addition to financial inclusion, other mediating variables such as financial recording or business management competency can be studied to test their influence on the relationship between financial literacy and MSME performance. Further research can also be conducted with a longitudinal approach to see changes in the effects of financial literacy and inclusion on MSME performance in the long term. This approach can help understand the impacts that may arise over time.

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