

**THE EFFECT OF FINANCIAL LITERACY AND INCLUSION FINANCE
ON MSME PERFORMANCE (CASE STUDY ON MSMEs
MEDAN DISTRICTS AND PAPER)**

Warsani Purnama Sari¹⁾, Ahmad Prayudi²⁾, Mawaddah Ramadani^{3*)} & Teddi Pribadi⁴⁾

^{1,2,3&4)}Program Studi Akuntansi, Fakultas Ekonomi dan Bisnis, Universitas Medan Area,
Medan

mawaddahrmd@gmail.com

Abstract

The study purpose to analyze the influence of financial literacy and financial inclusion on the performance of MSMEs in Medan Amplas District, both partially and simultaneously. The type of research used in this research is quantitative research using an associative approach. The population and sample in this research were 107 MSMEs in Medan Amplas District. The type of data used in this research is quantitative data. The data source used in this research is primary data. The data collection method used in this research is a questionnaire. The data analysis method used is multiple linear regression analysis using the SPSS (Statistical Program For Social Science) technique version 17. The research results show that partially and simultaneously financial literacy and financial inclusion have a positive and significant effect on the performance of MSMEs in Medan Amplas District.

Keywords: *Financial Literacy, Financial Inclusion and micro small and Medium Enterprises Performance.*

INTRODUCTION

Financial literacy and financial inclusion are two crucial concepts in the world of MSMEs (Micro, Small, and Medium Enterprises). Financial literacy refers to the knowledge, skills, and confidence that affect attitudes and behaviors to improve decision-making and financial management for achieving well-being. It encompasses the understanding, skills, and beliefs that influence attitudes and behaviors to enhance the quality of decision-making and financial management with the aim of achieving well-being (Akhiar, 2021). Meanwhile, financial inclusion refers to the access that individuals have to financial services, such as banking, insurance, financing, pension programs, and investments. The level of financial literacy in Indonesia remains low, although it has been steadily improving year by year. Low financial literacy has the potential to cause costly losses in the future and reduce quality of life due to a series of financial issues (Akhiar, 2021). Financial literacy is an essential skill that individuals need to make and manage sound financial decisions, ranging from choices about saving, investing, applying for loans, and more. The level of financial inclusion in Indonesia is also still far below the level of financial literacy (OJK, 2022). The government and the Financial Services Authority (OJK) are actively working to enhance both financial literacy and inclusion through various initiatives, such as the National Strategy for Financial Literacy Indonesia (SNLKI). The gap between financial literacy and financial inclusion in Indonesia has decreased over the years, but continuous efforts are needed to further narrow this gap.

Table 1. Number of MSMEs in Medan Amplas Subdistrict

Business Type	Year				Number of MSME Actors
	2020	2021	2022	2023	
Agribusiness			1		1
Retail	5	1		1	7
Fashion	3		1		4
Services	18	2	1		21
Craft	7	1	1		9
Culinary	30	15	6	10	61
Manufacturing	1	2	1		4
TOTAL	64	21	11	11	107

Source: Dinas Koperasi, Usaha Kecil, Menengah, Perindustrian, dan perdagangan Kota Medan.

THEORETICAL FOUNDATION

Rational Choice Theory

Rational Choice Theory is a framework for understanding the decision-making process, applicable at both micro and macro levels (Afriana and Riza, 2017). According to Putri and Widodo (2016), at the micro level, decision-makers are individuals who make rational choices aimed at achieving goals that can be considered optimal based on various knowledge, information, and cognitive data. This theory can be related to Keynes' consumption theory (1936), which posits that individuals with higher incomes tend to save a larger proportion of their income compared to those with lower incomes. Both Rational Choice Theory and Keynes' consumption theory suggest that an individual's decision to save is influenced by income, financial literacy, and information about saving products.

MSME Performance

MSME performance refers to the output achieved by an individual through their tasks within a company during a specific period, which is related to the company's performance standards or values. Performance is essentially the attainment of goals by an individual or company within a given objective (Aribawa, 2016).

Financial Literacy

The National Strategy for Financial Literacy Indonesia (SNLKI) (2017) defines financial literacy as the knowledge and understanding of financial concepts and risks, including the skills, motivation, and confidence to apply this knowledge to make effective decisions, enhance individual and community financial well-being, and participate in economic activities. Without

adequate financial literacy, individuals may struggle to select appropriate savings or investment products and could be at risk of financial fraud.

Financial Inclusion

Financial inclusion is a condition where all individuals can access quality financial services, at relatively affordable prices, and with convenient and satisfactory methods (Gradeva et al., 2011).

RESEARCH METHODOLOGY

This study will use a quantitative research approach with an associative approach. Quantitative research involves obtaining data in numerical form for statistical analysis. Associative research aims to determine the influence or relationship between two or more variables (Sugiyono, 2015). This type of research is considered to have a higher level of sophistication compared to descriptive and comparative research, as it allows for the development of theories that can explain, predict, and control phenomena.

RESULTS AND DISCUSSION

1.Results of Classical Assumption Tests

Normality Test

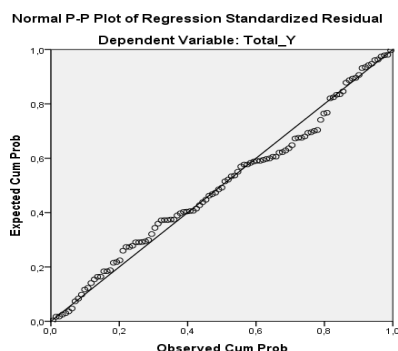


Figure 1. Graphical Method: P-P Plot

The test results show that the points in the regression model are evenly distributed and closely aligned along the diagonal line of the y-axis. Therefore, it can be concluded that the regression model exhibits a normal distribution.

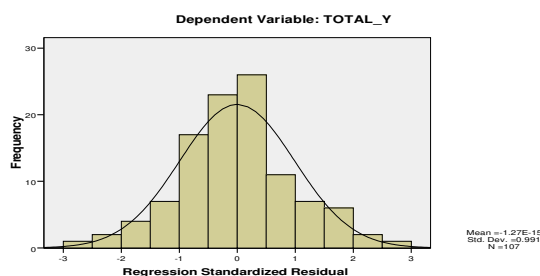


Figure 2. Histogram Graphical Method

A histogram is considered normal if the data distribution forms a bell shape, without skewing to the left or right (Santoso, 2015: 43). The histogram in the image

above forms a bell shape and does not skew to either side, thus it is considered to be normally distributed.

Metode Kolmogorov Smirnov Test

Tabel 2. Hasil Uji Kolmogorov-Smirnov Test

		Unstandardized Residual
N		107
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,89549469
Most Extreme Differences	Absolute	,079
	Positive	,079
	Negative	-,057
Kolmogorov-Smirnov Z		,821
Asymp. Sig. (2-tailed)		,510

a. Test distribution is Normal.

b. Calculated from data.

The test results show that the Kolmogorov-Smirnov test has a significance value (Asymp. Sig. 2-tailed) of 0.510. Since the significance value of 0.510 is greater than the threshold of 0.05, it can be concluded that the residuals are normally distributed and meet the normality assumption..

Multicollinearity Test

Table 3. Model Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Total_X1	,744	1,344
	Total_X2	,744	1,344

The results indicate that for the variables financial literacy and financial inclusion, the tolerance value is 0.744 (> 0.1) and the VIF value is 1.344 (< 10). Therefore, it can be concluded that there is no multicollinearity in the regression model, meaning that there is no correlation between the independent variables.

Heteroscedasticity Test

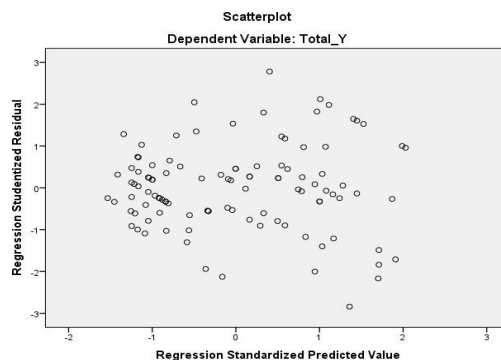


Figure 3. Scatterplot Graph Method

The scatterplot graph for heteroscedasticity testing, as shown in the image above, indicates that the points in the regression model are unevenly distributed and do not form a regular pattern. Thus, it can be concluded that the regression model does not exhibit signs of heteroscedasticity.

Glejzer Method

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2,771	1,531		-1,810	,073
1 Total_X1	,114	,037	,328	3,067	,592
Total_X2	,011	,044	,028	,260	,795

a. Dependent Variable: Abs_Res

Variables financial literacy (significance value = 0.592) and financial inclusion (significance value = 0.795), both values are greater than 0.05. Therefore, it can be concluded that the regression model does not exhibit signs of heteroscedasticity, meaning that there are no disruptive variables in this study.

Table 5. Reliability Test

Variable	Cronbach's Alpha	N of Items	Standard Coefficient	Keterangan
Financial Literacy (X1)	0,929	10	0,60	Reliable
Financial Inclusion (X2)	0,912	9		Reliable
SME Performance (Y)	0,929	8		Reliable

For the variables of Financial Literacy, Financial Inclusion, and SME Performance, the Cronbach's Alpha values are all greater than 0.6. Therefore, the regression model can be

concluded to be reliable (construct). This means that most respondents in this study provided relatively stable and consistent answers across different questionnaires.

Table 6. Financial Literacy Validity Test

Variable	Item Kuesioner	Pearson Correlation (r hitung)	r tabel	Keterangan
Financial Literacy (X1)	X1.1	0,737	0,190	Valid
	X1.2	0,701		Valid
	X1.3	0,719		Valid
	X1.4	0,712		Valid
	X1.5	0,820		Valid
	X1.6	0,830		Valid
	X1.7	0,849		Valid
	X1.8	0,860		Valid
	X1.9	0,823		Valid
	X1.10	0,761		Valid

The sample size in this study is $n = 107$, so r table = 0.190 for a one-tailed test at 0.05 significance level. Table 4.9 shows that all questionnaire items for the Financial Literacy variable (X1) with 10 statements have a coefficient of r calculated $> r$ table (0.190). This means that most respondents, namely SMEs, strongly agree that a good understanding of financial literacy leads to better SME performance.

Table 7. Financial Inclusion Validity Test

Variable	Item Kuesioner	Pearson Correlation (r hitung)	r tabel	Keterangan
Financial Inclusion (X2)	X2.1	0,707	0,190	Valid
	X2.2	0,782		Valid
	X2.3	0,838		Valid
	X2.4	0,722		Valid
	X2.5	0,735		Valid
	X2.6	0,773		Valid
	X2.7	0,773		Valid
	X2.8	0,791		Valid
	X2.9	0,805		Valid

The sample size in this study is $n = 107$, so r table = 0.190 for a one-tailed test at 0.05 significance level. Table 4.10 shows that all questionnaire items for the Financial Inclusion variable (X2) with 9 statements have a coefficient of r calculated $> r$ table

(0.190). This means that most respondents, namely SMEs, strongly agree that a good understanding of financial inclusion leads to better SME performance.

Table 8. SME Performance Validity Test

Variable	Item Kuesioner	Pearson Correlation (r hitung)	r tabel	Keterangan
SME Performance (Y)	Y.1	0,826	0,1900	Valid
	Y.2	0,796		Valid
	Y.3	0,810		Valid
	Y.4	0,832		Valid
	Y.5	0,854		Valid
	Y.6	0,815		Valid
	Y.7	0,820		Valid
	Y.8	0,796		Valid

All questionnaire items for the SME Performance variable (Y) with 8 items have a coefficient of r calculated > r table (0.190), thus all items are considered valid. This indicates that to achieve good SME performance, a solid understanding of financial literacy and financial inclusion is needed, enabling SMEs to make informed financial decisions.

Table 9. Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4,252	2,531		1,680	,096
1 Total_X1	,544	,061	,669	8,853	,000
Total_X2	,329	,072	,335	3,785	,007

he multiple linear regression equation can be presented as:

$$Y = 4,252 + 0,544 X1 + 0,329 X2 + e$$

The interpretation of the multiple linear regression equation is as follows:

- The constant value of 4.252 is positive, indicating that it can increase SME performance by 4.252 units assuming the coefficients of financial literacy and financial inclusion remain constant (zero).
- The financial literacy variable has a regression coefficient of 0.544, indicating that a one-point increase in financial literacy can improve SME performance by 0.544 units.
- The financial inclusion variable has a regression coefficient of 0.329, indicating that a one-point increase in financial inclusion can increase business income by 0.329 units.

Partial Test (t-test)

The results of the partial test between independent variables (financial literacy and financial inclusion) and the dependent variable (SME Performance) are presented in the table below:

Table 10. T-Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4,252	2,531		1,680	,096
Total_X1	,544	,061	,669	8,853	,000
Total_X2	,329	,072	,335	3,785	,007

In this study, the sample size is $n = 107$. The t-table value can be found in the statistical table at a significance level of $0.05/2$ (two-tailed test) with $df = n-k-1$ or $107-2-1 = 104$ (k is the number of independent variables). The obtained t-table coefficient value is 1.984 at a significance level of 0.05. The results of the partial tests are as follows:

1. Financial literacy has a positive and significant effect on SME performance in Medan Amplas District (t calculated > t table, $8.853 > 1.984$ at sig. $0.000 < 0.05$), so the null hypothesis H_0 is rejected and H_1 is accepted.
2. Financial inclusion has a positive and significant effect on SME performance in Medan Amplas District (t calculated > t table, $3.785 > 1.984$ at sig. $0.007 < 0.05$), so the null hypothesis H_0 is rejected and H_2 is accepted.

Based on the above results, both independent variables have a partial effect on SME performance in Medan Amplas District.

Simultaneous Test (F-test)

Table 11. F-Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1120,504	2	560,252	65,564	,000 ^b
Residual	888,692	104	8,545		
Total	2009,196	106			

a. Dependent Variable: Total_Y

b. Predictors: (Constant), Total_X2, Total_X1

The sample size for this study is $n = 107$, where the f-table value for $(k ; n-k) = (2 ; 107-2) = (2 ; 105)$ is $F_{table} = 3.08$ at a significance level of 0.05. The calculated F value is 65.564 at a significance level of 0.000. Therefore, it can be concluded that financial literacy and financial inclusion simultaneously have a significant effect on SME

performance in Medan Amplas District (F calculated > F table, 65.564 > 3.08 at sig. 0.000 < 0.05), so the null hypothesis H0 is rejected and H3 is accepted.

Coefficient of Determination (R²)

Table 12. Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,747 ^a	,558	,549	2,923

a. Predictors: (Constant), Total_X2, Total_X1

b. Dependent Variable: Total_Y

The coefficient of determination (R²) value is R Square = 0.558 or 55.8%, which means there is a strong correlation between financial literacy and financial inclusion on SME performance in Medan Amplas District. This indicates that financial literacy and financial inclusion account for 55.8% of the variation in SME performance in Medan Amplas District. In other words, SME performance can be influenced by financial literacy and financial inclusion by 55.8%, while the remaining 44.2% is affected by other variables not studied.

CONCLUSION AND RECOMMENDATIONS

This study aims to provide an analysis of the effects of independent variables, namely financial literacy and financial inclusion, on SME performance as the dependent variable in Medan Amplas District. After collecting and processing the data, the conclusions are as follows:

1. Financial literacy has a positive and significant effect on SME performance in Medan Amplas District. This means that the better the understanding of financial literacy by SME actors, the better the performance of the SMEs.
2. Financial inclusion has a positive and significant effect on SME performance in Medan Amplas District. This means that improved financial inclusion by SME actors in Medan Amplas District, such as through innovative practices, enhances the performance of SMEs.

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