

## The Influence of Financial Literacy, Financial Inclusion, Financial Management, and Financial Access on Income of MSMEs in the Service Sector in Pontianak City

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### ABSTRACT

*Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting the national economy, particularly in providing employment, alleviating poverty, and improving community welfare. This study aims to analyze the influence of financial literacy, financial inclusion, financial management, and financial access on the income of MSMEs in the service sector in Pontianak City. The research method used is a quantitative associative method with data collection techniques through questionnaires. The research sample consists of MSMEs in the service sector selected based on business scale. Data testing was carried out through validity, reliability, normality, multicollinearity, linearity, and multiple linear regression analysis. The results showed that partially and simultaneously, the four independent variables have a positive and significant effect on MSME income. The coefficient of determination ( $R^2$ ) value of 0.523 indicates that 52.3% of the variation in MSME income can be explained by financial literacy, financial inclusion, financial management, and financial access. Among these variables, financial access has the most dominant influence. This finding emphasizes the importance of improving financial literacy and access as a strategy to strengthen MSME performance. This research also provides recommendations for MSME actors, the government, financial institutions, and further researchers in supporting the sustainable development of MSMEs.*

### INTRODUCTION

According to Verma (2019), Micro, Small, and Medium Enterprises, commonly referred to as MSMEs, are businesses operating in various business sectors, serving the public interest. MSMEs are the backbone of the nation's economy. We cannot deny the significant role MSMEs play in reducing unemployment, providing jobs, alleviating poverty, improving welfare, and building national character through entrepreneurship (Abrasyi, 2023).

Statistics and research show that MSMEs represent the largest business group. MSMEs are legally regulated through Law Number 20 of 2008 concerning Micro, Small, and Medium Enterprises. MSMEs are the largest economic sector in the Indonesian economy and have proven to be a safeguard for the national economy during times of crisis and a driving force for post-crisis economic growth (Widjaja et al., 2024). Therefore, we need to be aware of the need

to develop MSMEs in Indonesia to ensure public welfare. MSMEs are an economic sector that plays a significant role in the national economy.

In developed countries, MSMEs play a crucial role because this business group absorbs the largest workforce compared to large businesses (Maksimov et al., 2017). In developing countries, particularly in Asia, Africa, and Latin America, MSMEs also play a crucial role, particularly in terms of employment opportunities and income sources for the poor, income distribution, poverty reduction, and rural economic development.

MSMEs are required to manage their finances effectively (Matare & Sreedhara, 2020). Providing education on the importance of sound financial management can help MSMEs develop their businesses. MSMEs are crucial in driving the national economy, as they possess a strong national base and a significant workforce. This encourages MSMEs to raise awareness of the importance of financial literacy and inclusion in managing their finances, leading to the creation of high-quality MSMEs with sound financial literacy (Dwyanti, 2024; Cahyawati et al., 2023).

The Central Statistics Agency (BPS) defines MSME criteria as the number of employees employed based on business scale. Micro businesses have 1-4 employees, small businesses have 5-19 employees, and medium businesses have 20-99 employees. Meanwhile, Bank Indonesia (BI) defines MSME criteria based on assets and turnover, such as micro-enterprises having maximum assets of IDR 50 million, small-enterprises having minimum assets of IDR 50 million to IDR 500 million, and medium-sized enterprises having minimum assets of IDR 500 million to IDR 10 billion.

Andarsari & Ningtyas (2019) said that, financial literacy is the ability to understand and use various financial skills, including personal management, budgeting, and investment. Financial literacy enables individuals to make effective financial decisions and achieve financial well-being (Kumar et al., 2023; Andreas & Prabowo, 2023). Dividing financial literacy into four main areas can help individuals understand the different aspects of financial management. These four main areas are basic financial knowledge, savings and loans (deposits and loans), protection (insurance), and investment. Each area plays a crucial role in ensuring individuals can manage their finances wisely and protect themselves from financial risks.

Financial inclusion has been used to address the needs of lower-income communities since the 2008 crisis, focusing on groups at the bottom of the pyramid (those with low and irregular incomes, those living in remote areas, those with disabilities, workers without legal identity documents, and marginalized communities) who are generally unbanked, a rate that is very high outside of developed countries. Financial inclusion is defined as a condition where each community has access to financial institutions at affordable costs according to their needs and abilities in order to improve community welfare (Birkenmaier et al., 2029).

Another definition relates to the large number of poor people and the lack of available collateral that makes it difficult for most people to access financial institutions. Therefore, financial inclusion was established to better reach lower-class communities. Align with research from Demirgüç-Kunt et al. (2023) and Abu (2016), Financial inclusion also encompasses increasing public understanding of financial systems, products and services, as well as the availability of formal financial services. Some of the benefits of financial inclusion include the creation of economic efficiency, the establishment of financial system stability, the availability of new market potential for banking, and the creation of sustainable local and national economic growth.

Financial management is all activities related to the acquisition, financing, and management of assets with several overall objectives (Rambe et al., 2017). According to the Great Dictionary of the Indonesian Language, management is a process that can help in formulating policies, organizational goals, and processes that provide oversight of all things involved in implementing policies and achieving goals. Financial management has a specific meaning,

including planning, implementation, reporting, and financial supervision, which can be carried out by individuals, companies, and governments to achieve planned goals (Hasan et al., 2022).

The better the financial management, the more likely the planned goals will be achieved. Revenue is very influential for the survival of the business; the greater the revenue earned, the greater the business's ability to finance all expenses and activities that will be carried out by the company (Shubina et al., 2022). Furthermore, revenue also affects the company's profit and loss presented in the income statement. And it is important to remember that revenue is the lifeblood of a company. Without revenue, there is no profit; without profit, there is no company. This, of course, cannot be separated from the influence of revenue from the company's operating results. The definition of revenue itself is various. The following are several views that confirm the conceptual meaning of revenue. You need to know about the concept of business unity.

## METHODOLOGY AND PROCEDURES

The type of research used in this study is an associative research method. According to Sugiyono (2013:11): "The type of associative research is a research that aims to determine the influence or relationship between two or more variables". This research was conducted to determine the influence between the variables of Financial Literacy (X1), Financial Inclusion (X2), Financial Management (X3), Financial Access (X4) with the Income variable (Y). The data collection technique used in this study is using a questionnaire. According to Sugiyono (2018: 193): "A questionnaire is a data collection technique carried out by giving a set of written questions or statements to respondents to answer". According to Sugiyono (2008: 115): "Population is a generalization area consisting of: objects/subjects that have a certain quantity of characteristics determined by researchers to be studied and then conclusions drawn". The population in this study is MSMEs involved in the Service Sector in Pontianak City, totaling 3,377. According to Sugiyono (2019:108), "A sample is a portion of the population's size and characteristics." In this study, samples were taken from MSMEs in the service sector in Pontianak City for analysis based on business scale. Data analysis in this study began with instrument testing, consisting of validity and reliability tests. The validity test aimed to measure whether the questionnaire was able to convey what it was supposed to measure by comparing the calculated  $r$  and tabulated  $r$  values. Reliability testing was conducted using the alpha value, where the instrument was considered reliable if the alpha value was  $>0.60$ . Next, classical assumption tests were conducted, including normality testing (using the Kolmogorov-Smirnov test), multicollinearity testing (with a tolerance value of  $<0.10$  and  $VIF >10$ ), and linearity testing (based on the significance of a deviation from linearity  $>0.05$  indicating a linear relationship). Statistical analysis uses multiple linear regression analysis with the formula  $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$ , where  $Y$  is MSME income, and  $X$  is the variable of literacy, inclusion, management, and financial access. Further tests include the correlation coefficient ( $R$ ) test to see the strength of the relationship between variables, and the coefficient of determination ( $R^2$ ) to see the contribution of independent variables to the dependent variable. Influence testing is carried out through the  $F$  test (simultaneous) and  $t$  test (partial). The  $F$  test determines the joint influence of independent variables on income, while the  $t$  test examines the influence of each variable individually. The test results are based on the significance value, with a limit of 0.05 as the basis for decision making.

## RESULTS AND DISCUSSION

### Validity Test

Validity testing conducted in a study aims to identify the level of validity of a statement instrument from a research questionnaire. Validity testing is performed by correlating all item scores for statements or questions in the questionnaire, then comparing the test results (calculated  $r$ ) with the table  $r$  value. The table  $r$  value can be obtained using the formula  $df = n$

(number of samples) - 2 = 148. With a significance level of 0.05, the table r value is 0.160. The results of the validity test for each statement in the Financial Literacy variable (X1) are shown in Table 1 below:

Table 1. Results of the Financial Literacy Validity Test (X1)

Indicator	r-count	r-table	Information
X1.1	0,705	0,160	Valid
X1.2	0,716	0,160	Valid
X1.3	0,717	0,160	Valid
X1.4	0,520	0,160	Valid
X1.5	0,584	0,160	Valid
X1.6	0,606	0,160	Valid
X1.7	0,646	0,160	Valid
X1.8	0,591	0,160	Valid
X1.9	0,589	0,160	Valid

Source: Processed Data, 2025

Based on the validity test results for the Financial Literacy variable (X1) in Table 1 above, it can be seen that all statement items in the Financial Literacy variable (X1) have a calculated r value > r table of 0.160. Therefore, all questionnaire statement items in the Financial Literacy variable (X1) in this study can be declared valid. The validity test results for each statement in the Financial Inclusion variable (X2) can be seen in Table 2 below:

Table 2. Results of the Financial Inclusion (X2) Validity Test

Indicator	r-count	r-table	Information
X1.1	0,715	0,160	Valid
X1.2	0,742	0,160	Valid
X1.3	0,683	0,160	Valid
X1.4	0,542	0,160	Valid
X1.5	0,672	0,160	Valid
X1.6	0,695	0,160	Valid
X1.7	0,615	0,160	Valid
X1.8	0,584	0,160	Valid
X1.9	0,685	0,160	Valid

Source: Processed Data, 2025

Based on the validity test results for the Financial Inclusion variable (X2) in Table 2 above, it can be seen that all statement items in the Financial Inclusion variable (X2) have a calculated r value > r table of 0.160. Therefore, all questionnaire statement items in the Financial Inclusion variable (X2) in this study can be declared valid. The validity test results for each statement in the Financial Management variable (X3) can be seen in Table 3 below:

Table 3. Results of the Validity Test for Financial Management (X3)

Indicator	r-count	r-table	Information
X3.1	0,625	0,160	Valid
X3.2	0,666	0,160	Valid
X3.3	0,643	0,160	Valid
X3.4	0,663	0,160	Valid
X3.5	0,640	0,160	Valid

X3.6	0,604	0,160	Valid
X3.7	0,636	0,160	Valid
X3.8	0,674	0,160	Valid
X3.9	0,662	0,160	Valid

Source: Processed Data, 2025

Based on the validity test results for the Financial Management variable (X3) in Table 3 above, it can be seen that all statement items in the Financial Management variable (X3) have a calculated  $r$  value  $>$   $r$  table of 0.160. Therefore, all questionnaire statement items in the Financial Management variable (X3) in this study can be declared valid. The statement validity test results for the Financial Access variable (X4) can be seen in Table 4 below:

Table 4. Results of the Validity Test for Financial Access (X4)

Indicator	r-count	r-table	Information
X4.1	0,703	0,160	Valid
X4.2	0,697	0,160	Valid
X4.3	0,676	0,160	Valid
X4.4	0,591	0,160	Valid
X4.5	0,715	0,160	Valid
X4.6	0,671	0,160	Valid
X4.7	0,704	0,160	Valid
X4.8	0,689	0,160	Valid
X4.9	0,546	0,160	Valid

Source: Data Processing, 2025

Based on the validity test results for the Financial Access variable (X4) in Table 4 above, it can be seen that all statement items in the Financial Access variable (X4) have a calculated  $r$  value  $>$   $r$  table of 0.160. Therefore, all questionnaire statement items in the Financial Access variable (X4) in this study can be declared valid. The validity test results for each statement in the MSME Income variable (Y) can be seen in Table 5.

Table 5: MSME Income Validity Test Results

Indicator	r-count	r-table	Information
Y1	0,800	0,160	Valid
Y2	0,806	0,160	Valid
Y3	0,773	0,160	Valid
Y4	0,844	0,160	Valid
Y5	0,807	0,160	Valid
Y6	0,660	0,160	Valid

Source: Data Processing, 2025

Based on the validity test results for the MSME Income (Y) variable in Table 5 above, it can be seen that all items in the MSME Income (Y) variable have a calculated  $r$  value  $>$   $r$  table of 0.160. Therefore, all questionnaire items in the MSME Income (Y) variable in this study can be declared valid.

### Reliability Test

The reliability test conducted in this study aims to analyze the level of reliability of a statement in the research questionnaire as a measuring tool. The reliability test in this study used the Cronbach's Alpha method. A measurement item is considered reliable if it has a significant

Cronbach's Alpha value of 0.60. The results of the reliability test for Financial Literacy (X1) can be seen in Table 6 below:

Table 6. Results of the Reliability Test for Financial Literacy (X1)

**Reliability Statistic**

<b>Cronbach' alpha</b>	<b>N of Items</b>
.810	9

Source: Processed Data, 2025

Based on the reliability test results for the Financial Literacy variable (X1) in Table 6 above, the Cronbach's Alpha value for the Financial Literacy variable is 0.810, which is greater than 0.60. Therefore, it can be concluded that all measurement items for the Financial Literacy variable (X1) in this study are reliable. The results of the reliability test for the Financial Inclusion variable (X2) can be seen in Table 7.

Table 7. Results of the Financial Inclusion Reliability Test (X2)

**Reliability Statistic**

<b>Cronbach's Alpha</b>	<b>N of Item</b>
.839	9

Source: Processed Data, 2025

Based on the reliability test results for the Financial Inclusion variable (X2) in Table 7 above, the Cronbach's Alpha value for the Financial Inclusion variable is 0.839, which is greater than 0.60. Therefore, it can be concluded that all measurement items for the Financial Inclusion variable (X3) in this study are reliable. The results of the reliability test for the Financial Management variable (X3) can be seen in Table 8.

Table 8: Results of the Financial Management Reliability Test (X3)

**Reliability Statistic**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.895	9

Source: Processed Data, 2025

Based on the reliability test results for the Financial Management variable (X3) in Table 8 above, the Cronbach's Alpha value for the Financial Management variable is 0.895, which is greater than 0.60. Therefore, it can be concluded that all measurement items for the Financial Management variable (X3) in this study are reliable. The results of the reliability test for the Financial Access variable (X4) can be seen in Table 9.

Table 9. Results of the Financial Access Reliability Test (X4)

**Realibility Statistic**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.842	9

Source: Processed Data, 2025

Based on the reliability test results for the Financial Access variable (X4) in Table 9 above, the Cronbach's Alpha value for the Financial Access variable is 0.842, which is greater than 0.60. Therefore, it can be concluded that all measurement items for the Financial Access variable (X4) in this study are reliable. The results of the reliability test for the MSME Income variable (Y) can be seen in Table 10.



Table 10. Results of the MSME Income Reliability Test (Y)

**Reliability Statistic**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
.866	6

Source: Processed Data, 2025

Based on the reliability test results for the MSME Income (Y) variable in Table 10 above, the Cronbach's Alpha value for the MSME Income variable is 0.866, which is greater than 0.60. Therefore, it can be concluded that all measurement items for MSME Income (Y) in this study are reliable.

**Normality Test**

The normality test conducted in a study aims to identify whether the data in a study is normally distributed. The method used in this study was the Kolmogorov-Smirnov method. Based on the analysis using SPSS, the normality test results are shown in Table 11 below:

Table 11. Normality Test Results

<b>One-Sample Kolmogorov-Smirnov Test</b>		
		Unstandardized Residual
N		150
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	.8363959
Most Extreme Differences	Absolute	.068
	Positive	.037
	Negative	-.068
Test Statistic		.068
Asymp. Sig. (2-tailed)		.085 <sup>c</sup>
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Data Processing, 2025

Based on the results of the normality test in Table 11 above, the Asymp. Sig. (2-tailed) value is 0.085, indicating that it is greater than 0.05. Therefore, it can be concluded that the data in this study are normally distributed.

**Linearity Test**

The linearity test conducted in this study aims to identify whether there is a linear relationship between the independent and dependent variables. The method used is Deviation From Linearity. Based on the analysis using SPSS, the linearity test results are shown in Table 12.

Table 12. Results of the Linearity Test for Financial Literacy and Income

**UMKM**

<b>ANOVA Table</b>						
			Sum of Squares	df	Mean Square	F
						Sig.
MSME	Between	(Combined)	25.016	30	.834	1.806
Income *	Groups	Linearity	9.875	1	9.875	21.388
						.014
						.000

Financial Literacy		Deviation from Linearity	15.142	29	.522	1.131	.315
	Within Groups		54.940	119	.462		
	Total		79.957	149			

Source: Processed Data, 2025

Based on the results of the linearity test for the Financial Literacy and MSME Income variables in Table 12 above, the significant Deviation from Linearity value between the two variables was 0.315, indicating a linear relationship between the Financial Literacy (X1) and MSME Income (Y) variables. The results of the linearity test for the Financial Inclusion (X2) and MSME Income (Y) variables can be seen in Table 13 below:

Table 13. Results of the Linearity Test for Financial Inclusion and MSME Income

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
MSME Income * Financial Inclusion	Between Groups	(Combined)	29.264	28	1.045	2.495	.000
		Linearity	19.730	1	19.730	47.095	.000
		Deviation from Linearity	9.534	27	.353	.843	.688
	Within Groups		50.629	121	.419		
	Total		79.957	149			

Source: Data Processing, 2025

Based on the results of the linearity test for the Financial Inclusion and MSME Income variables in Table 13 above, the Deviation from Linearity significance value between the two variables was 0.688, indicating a linear relationship between Financial Inclusion (X2) and MSME Income (Y). The results of the linearity test for the Financial Management (X3) and MSME Income (Y) variables can be seen in Table 14 below:

Table 14. Results of the Linearity Test for Financial Management and MSME Income

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
MSME Income * Financial Management	Between Groups	(Combined)	43.352	31	1.398	4.508	.000
		Linearity	28.902	1	28.902	93.169	.000
		Deviation from Linearity	14.450	30	.482	1.553	.051
	Within Groups		36.604	118	.310		
	Total		79.957	149			

Source: Data Processing, 2025

Based on the results of the linearity test for the Financial Management and MSME Income variables in Table 14 above, the Deviation from Linearity significance value between the two variables was 0.051, indicating a linear relationship between the Financial Management (X3) and



MSME Income (Y) variables. The results of the linearity test for the Financial Access (X4) and MSME Income (Y) variables can be seen in Table 15 below:

Table 15. Results of the Linearity Test for Financial Access and MSME Income

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
MSME Income* Financial Access	Between Groups	(Combined)	35.247	30	1.175	3.217	.000
		Linearity	21.046	1	21.046	56.015	.000
		Deviation from Linearity	14.201	29	.490	1.303	.162
	Within Groups		44.710	119	.376		
	Total		79.957	149			

Source: Processed Data, 2025

Based on the results of the linearity test for the Financial Access and MSME Income variables in Table 15 above, the Deviation from Linearity significance value between the two variables was 0.162, indicating a linear relationship between the Financial Access (X4) and MSME Income (Y) variables.

### Multicollinearity Test

The multicollinearity test conducted in a study aims to determine whether there is a high level of correlation between the independent variables in a regression model. If each independent variable is highly correlated with each other, it can cause deviations in the regression coefficient estimates and reduce the model's accuracy. Based on the analysis using SPSS, the results of the multicollinearity test are shown in Table 16 below:

Table 16. Multicollinearity Test Results

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.043	.240		4.347	.000		
	Financial Literacy	.122	.035	.101	2.052	.042	.736	1.359
	Financial Inclusion	.118	.056	.120	2.117	.036	.597	1.674
	Financial Management	.202	.084	.211	2.414	.017	.391	2.557
	Financial Access	.423	.070	.533	6.004	.000	.417	2.399
a. Dependent Variable: MSME Income								

Source: Processed Data, 2025

Based on the multicollinearity test results in Table 16 above, the following results can be explained: (1) The Tolerance value for the Financial Literacy variable (X1) is 0.736, indicating a value greater than 0.10. It also has a VIF value of 1.359, indicating a value less than 10.00; (2) The Tolerance value for the Financial Inclusion variable (X2) is 0.597, indicating a value greater

than 0.10. It also has a VIF value of 1.674, indicating a value less than 10.00; (3) The Tolerance value for the Financial Management variable (X3) is 0.391, indicating a value greater than 0.10. It also has a VIF value of 2.557, indicating a value less than 10.00. (4) The tolerance value for the Financial Access variable (X4) is 0.417, indicating a value greater than 0.10. It also has a VIF value of 2.399, indicating a value less than 10.00. Based on the explanation above and referring to the basis for decision-making, it can be concluded that there are no symptoms of multicollinearity among the variables Financial Literacy (X1), Financial Inclusion (X2), Financial Management (X3), and Financial Access (X4).

### Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the state (rise and fall) of a dependent variable when two or more independent variables act as predictors. Based on the analysis using SPSS, the regression coefficients are shown in Table 17 below:

Table 17. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.043	.240		4.347	.000
Financial Literacy	.122	.035	.101	2.052	.042
Financial Inclusion	.118	.056	.120	2.117	.036
Financial Management	.202	.084	.211	2.414	.017
Financial Access	.423	.070	.533	6.004	.000

a. Dependent Variable: MSME Income

Source: Processed Data, 2025

Based on Table 17 above, the multiple linear regression coefficient equation can be constructed as follows:

$$Y = 1.043 + 0.122 X_1 + 0.118 X_2 + 0.202 X_3 + 0.423 X_4$$

The constant (a) is 1.043, this means that if the variables Financial Literacy (X1), Financial Inclusion (X2), Financial Management (X3), Financial Access (X4) are zero. Then MSME Income (Y) will increase by 1.043. The regression coefficient (b1) of Financial Literacy (X1) is 0.122 and positive, meaning that if Financial Literacy increases, MSME Income will increase by 0.122. The regression coefficient (b2) of Financial Inclusion (X2) is 0.118 and positive, meaning that if Financial Inclusion increases, MSME Income will increase by 0.118. The regression coefficient (b3) of Financial Management (X3) is 0.202 and positive, meaning that if Financial Management increases, MSME Income will increase by 0.202. The regression coefficient (b4) for Financial Access (X4) is 0.425 and is positive, meaning that if Financial Access increases, MSME income will increase by 0.425.

### Correlation Coefficient

The correlation coefficient is used to determine the strength of the relationship between two or more variables and to determine the direction of the relationship between them. The technique used is Product Moment correlation. The results of the correlation coefficient test can be seen in Table 18 below:

Table 18. Correlation Coefficient Test Results

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.723 <sup>a</sup>	.523	.510	.51281
a. Predictors: (Constant), Financial Access, Financial Literacy, Financial Inclusion, Financial Management				

Source: Processed Data, 2025

Based on the results of the correlation coefficient test in Table 18 above, the test results obtained a correlation coefficient (R) of 0.723, indicating a strong correlation between Financial Literacy, Financial Inclusion, Financial Management, and Financial Access and MSME Income.

### Coefficient of Determination

The results of the coefficient of determination ( $R^2$ ) test in Table 19 above showed an R-squared value of 0.523, indicating that the variables Financial Literacy, Financial Inclusion, Financial Management, and Financial Access contribute 52.3% ( $1 \times 0.523 \times 100\%$ ) to MSME Income, while the remaining 47.7% of MSME Income is influenced by variables outside this study.

### Simultaneous Effect Test (F Test)

The simultaneous test (F-test) conducted in a study aims to analyze whether the independent variables in a hypothesis collectively have a significant influence on the dependent variable. Based on the results of the simultaneous hypothesis test (F-test) using SPSS, the results are shown in Table 20 below:

Table 20. Simultaneous Test Results (F-test)

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.825	4	10.456	39.762	.000 <sup>b</sup>
	Residual	38.131	145	.263		
	Total	79.957	149			
a. Dependent Variable: Pendapatan UMKM						
b. Predictors: (Constant), Financial Access, Financial Literacy, Financial Inclusion, Financial Management						

Source: Processed Data, 2025

Based on the results of the simultaneous test (F Test) in Table 20 above, the calculated F value was  $39.762 > F$  and a significance value of 0.00. Therefore, it can be concluded that the variables of Financial Literacy, Financial Inclusion, Financial Management, and Financial Access simultaneously have a positive and significant influence on MSME income.

### Persian Influence Test (t-Test)

The partial test (t-test) conducted in a study aims to examine the influence of each independent variable individually on the dependent variable in a hypothesis. The purpose of the t-test is to determine whether each independent variable makes a significant contribution to the dependent variable. Based on the results of the partial hypothesis test (t-test) using SPSS, the partial test results are shown in Table 21 below:

Table 21. Results of the Partial Test (T-Test)

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	1.043	.240		4.347	.000
	Financial Literacy	.122	.035	.101	2.052	.042
	Financial Inclusion	.118	.056	.120	2.117	.036
	Financial Management	.202	.084	.211	2.414	.017
	Financial Access	.423	.070	.533	6.004	.000
a. Dependent Variable: MSME Income						

Source: Processed Data, 2025

Based on the partial test results (t-test) in Table 21 above, the following explanations can be given: (1) The calculated t-value for the Financial Literacy variable (X1) is  $2.052 > t$ -table value of 1.655, with a significance value of  $0.042 < 0.05$ . It can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. Therefore, it can be interpreted that Financial Literacy partially has a positive and significant influence on MSME income. (2) The calculated t-value for the Financial Inclusion variable (X2) is  $2.117 > t$ -table value of 1.655, with a significance value of  $0.036 < 0.05$ . It can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. Therefore, it can be interpreted that Financial Inclusion partially has a positive and significant influence on MSME income. (3) The calculated t value of the Financial Management variable (X3) is  $2.414 > t$  table of 1.655 and the significance value is  $0.017 < 0.05$ , so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. So it can be interpreted that Financial Management partially has a positive and significant influence on MSME Income; (4) The calculated t value of the Financial Access variable (X4) is  $6.004 > t$  table of 1.655 and the significance value is  $0.000 < 0.05$ , so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. So it can be interpreted that Financial Access partially has a positive and significant influence on MSME Income.

## CONCLUSION

Based on the research results, the four independent variables, namely Financial Literacy, Financial Inclusion, Financial Management, and Financial Access, have a positive and significant effect on the income of MSMEs in the service sector in Pontianak City, both partially and simultaneously. Good financial literacy helps MSMEs manage business finances effectively, while financial inclusion facilitates access to formal financial services that support business operations and development. Orderly financial management also contributes directly to business stability and sustainability. Among all variables, financial access has the most dominant influence on income, indicating the importance of easy access to financing and quality financial services. Instrument tests show that all indicators are valid and reliable, and classical assumption tests confirm that the data meets the requirements for normality, is free from multicollinearity, and has a linear relationship. The coefficient of determination value of 52.3% indicates that these variables are able to explain more than half of the variation in MSME income in this research model.

## SUGGESTION

The recommendations from this study cover four main areas. For MSMEs, it is recommended to improve their financial management skills and financial product literacy through training and mentoring. The MSME Office is expected to implement more comprehensive empowerment programs, including financial literacy and easy access to financing, and strengthen cross-sectoral collaboration. For future researchers, this study can serve as a reference for further research with a broader scope of regions and business types. Meanwhile, financial institutions are encouraged to provide products tailored to the characteristics of MSMEs and provide financial education to avoid detrimental informal lending practices.

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