

Analysis of the Effect of Credit Term and Interest Rate Level on the Growth of Micro, Small, and Medium Enterprises

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ABSTRACT

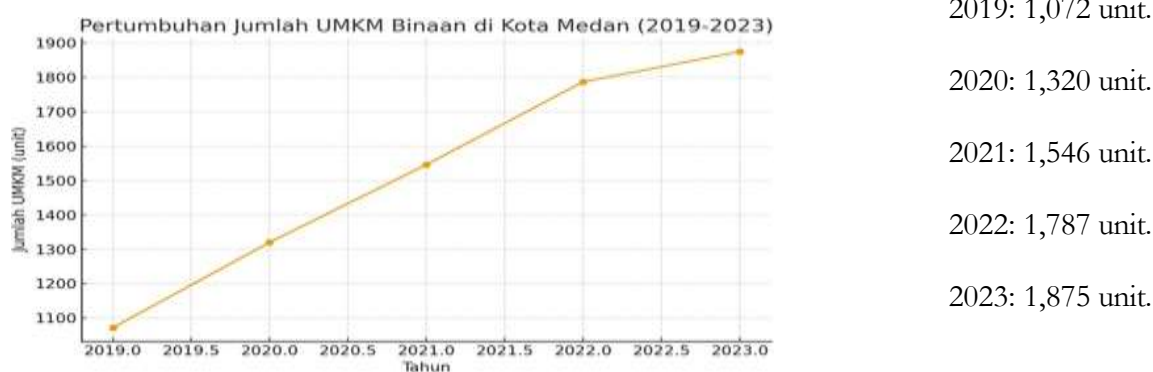
This study examines some of the variables influencing the development of MSMEs in Medan City. The study uses a quantitative model using multiple linear regression on secondary reports for 2019–2023, this research proves that loan terms contribute significantly to MSME development, while interest rates do not. Together, both contribute significantly, with a coefficient of determination of 18.8%, indicating that other factors, such as managerial ability, innovation, and macroeconomic conditions, still account for 81.2%. The results confirm that the longer the loan term, the greater the opportunity for MSMEs to grow through more flexible cash flow and capital management. Meanwhile, MSME-friendly financing policies need to be continuously improved to encourage local economic growth.

Keywords: Loan Terms, Interest Rates, MSME Growth, Financing, Medan.

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in the Indonesian economy. This sector contributes significantly to creating job opportunities, supporting economic growth in every region, and helping reduce poverty. MSMEs are even known as a key pillar of the national economy due to their significant contribution to employment and Gross Domestic Product (GDP). However, MSMEs often encounter various obstacles in expanding their businesses, and one of the biggest challenges is limited access to financing.



Picture 1.1 Diagram growth MSMEs in city Medan Sumatra North from Year 2019 – 2023
(Source : BPS North Sumatra)

The growth of MSMEs in Medan from 2019 to 2022 demonstrated a positive trend, although it has tended to decline since 2020 due to the COVID-19 pandemic. However, economic recovery has driven a substantial increase in the number of MSMEs since 2021. Concurrently, credit terms provided by banks have increased, providing flexibility for MSMEs in managing their cash flow.

Table 1.1

Year	Average Time period Credit (month)	Average Ethnic group Flower (%)
2019	24	10
2020	24	9.5
2021	30	9.2
2022	46	9.3
2023	48	9.2

The gradual reduction in interest rates from 10% to 9.2% has also encouraged businesses to take advantage of business loans. The combination of long terms and low interest rates has contributed to supporting the MSME sector in Medan, North Sumatra.

In get When it comes to financing from financial institutions, two factors that significantly influence MSMEs' decisions and ability to obtain credit are the interest rate and the loan term. A loan term that is too short can result in high repayment burdens in a short time, thus hampering cash flow and business expansion. Conversely, a longer loan term can provide flexibility in payments, but also carries the risk of inflated interest expenses.

On the other hand, interest rates are also a crucial variable in determining the loan installment rates that MSMEs must repay. High interest rates can discourage businesses from accessing financing or even lead to business failure due to the pressure of heavy interest payments. However, low interest rates are considered more supportive of financing activities and business investment.

By considering the importance of both variables mentioned, it is necessary A more comprehensive analysis is needed to determine the extent to which credit terms and interest rates truly impact MSME development. A deeper understanding of this will assist the government, financial institutions, and business actors in developing more effective and sustainable financing policies and strategies for the MSME sector. By examining the impact of these two factors on MSME development, this study aims to provide a clear picture of the role of credit terms and interest rates in encouraging or hindering business progress. The findings of this study can serve as a reference for financial institutions, the government, and MSME actors in formulating more targeted and sustainable financing strategies and policies.

This study differs from previous studies because it specifically examines the combined implications between time periods credit and interest rates on growth MSMEs, not just one variable in isolation. Many previous studies tend to focus on general credit access or only highlight interest rates without considering how the length of the loan term affects business continuity and expansion. Furthermore, this study put growth MSMEs as variables The main focus includes aspects of increasing turnover, workforce, and production capacity, thus providing a comprehensive illustration of the impact of financing on overall business performance. This approach is intended to contribute to the academic literature and serve as a practical reference for financing institutions and policymakers.

METHOD

This study employs a quantitative research approach with a causal–associative and explanatory design to examine the effect of credit term and interest rate on the growth of Micro, Small, and Medium Enterprises (MSMEs). Quantitative methods are used to test the causal relationship between independent variables and the dependent variable through numerical data and statistical analysis. The research focuses on MSMEs in Medan that received credit facilities from government and private banks, including Bank BRI, Bank Mandiri, Bank Sumut, and other banking institutions operating in Medan. The study period covers 2019–2023. The population consists of MSME actors across nine business sectors in Medan, with samples representing part of the population selected based on data availability. The study relies on secondary data obtained from official government sources such as Statistics Indonesia (BPS) and other relevant institutional publications, including data on credit terms, interest rates, and MSME growth indicators.

Data analysis is conducted using multiple linear regression to examine the effect of credit term (X_1) and interest rate (X_2) on MSME growth (Y). Prior to regression analysis, classical assumption tests—including normality, multicollinearity, and heteroscedasticity tests are performed to ensure the validity and reliability of the regression model. Hypothesis testing is carried out using the t-test to assess partial effects and the F-test to examine simultaneous effects of the independent variables, while the coefficient of determination (R^2) is used to measure the model's explanatory power. All statistical analyses are processed using appropriate statistical software to ensure accuracy and consistency of the results.

FINDING AND DISCUSSION

Test Statistics Descriptive

Table Test Analysis Statistics Descriptive

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
<u>Jangka Waktu Kredit</u>	45	3,00	4,00	3,6000	0,49543
<u>Tingkat Suku Bunga</u>	45	3,52	5,81	4,6420	0,92301
<u>Pertumbuhan</u>	45	-10,28	12,65	2,9498	4,64708
Unstandardized Residual	45	-10,78387	8,52613	0,0000000	4,18746389
Valid N (listwise)	45				

Source : Processed by Researchers, 2025

From table 3.1 it is proven that the credit period contains an average value a total of 3.6000 with a minimum of 3.00 and a maximum of 4.00 and a standard deviation of 0.49543. The mean value which is almost close to the upper limit proves that the dominant sample used obtained credit facilities with a relatively long term. Low value deviation standard indicates existence data that Enough homogeneous, so that policy from the credit period provider, the credit period is more uniform and proves that there are flexible conditions in providing credit periods to support smooth cash flow and the growth of MSMEs.

The interest rate contains an average value of 4.6420 with a minimum of 3.52 and a maximum of 5.81 as well as deviation standard a number of 0.92301. Mark average Which The results show that the interest rate is in the category moderate, while the standard deviation value is tall prove existence variation on sample Which used. Difference This can be caused there are differences in the types of financing institutions and the amount of the loan applied for. For business growth, the average value is 2.9498 with a minimum of -

10.28 and maximum 12.65 and standard deviation 4.64708. The value The positive average proves that in general MSMEs experience substantial growth in growth business, this variable proves the difference due to the managerial capabilities and business strategies of MSME actors in utilizing the financing received.

Test Normality

Table Results Test Normality

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		45
Normal <u>Parameters</u> ^{a,b}	Mean	0,0000000
	Std. Deviation	4,18746389
Most Extreme Differences	Absolute	0,098
	Positive	0,093
	Negative	-0,098
Test Statistic		0,098
<u>Asymp. Sig. (2-tailed)</u>		,200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source : Processed by Researchers, 2025

Table 3.2 yields an *Asymp Sig* of 0.200 > 0.05. This proves that the data used by the researcher in the normality test is normally distributed, allowing for further testing.

Test Multicollinearity

Table Results Test Multicollinearity

<u>Coefficients</u> ^a			
Model	Collinearity Statistics		
	Tolerance	VIF	
1 (Constant)			
<u>Jangka Waktu Kredit</u>	0,541	1,847	
Tingkat Suku Bunga	0,541	1,847	
a. Dependent Variable: <u>Pertumbuhan</u>			

Source : Processed by Researchers, 2025

From table 3.3 it can be seen that the resulting *Tolerance value* is >0.1 while in the measurement implementing the *VIF value* produced for each variable is <10. Based on these measurements it can be said that the test results on the data used do not show symptoms of multicollinearity and can be continued in the next test.

Test Heteroscedasticity

Table Results Test Heteroscedasticity

<u>Coefficients</u> ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6,579	2,842		2,315	0,026
<u>Jangka Waktu Kredit</u>	-1,158	1,063	-0,224	-1,089	0,282
Tingkat Suku Bunga	0,187	0,571	0,068	0,328	0,744
a. Dependent Variable: <u>ABS Res</u>					

Source : Processed by Researchers, 2025

From table 3.4 it can be seen that the substantial value generated by implementing ABS_Residual on each variable >0.05 . Or based on Measurement can be assumed if the data used by the researcher is free from heteroscedasticity and hypothesis testing can be carried out.

Results Test Hypothesis

Test t

		Table Results Test T			
		BStd.		Beta	
		Error			
1	(Constant)	- 11,691	4,739	- 2,467	0.018
	Term Time	4,086	1,773	0.4362,305	0.026
	Credit				
	Interest	Rate -	0.951	- 0.003-	0.016 0.987
	0.015				

a. Dependent Variable: Growth Source : Processed by Researchers, 2025

Implications of Credit Term on the Growth of Micro, Small and Medium Enterprises

Based on the table above, the test shows that the Credit Period with MSME Growth proves the value of t_{hitung} positive of 2.305. The test results by implementing mark substantiality or probability 5% or 0.05 so obtained mark

t_{tabel} as big as 2.01669. By Because That obtained results mark $t_{hitung} > t_{tabel}$ namely 2,305 < 2.0166 . Then it is proven from the substantiality results of 0.026 or < 0.05 or H_0 rejected and H_a accepted. The analysis results show that partial credit terms have substantial positive implications for MSME growth.

Implications of Interest Rates on the Growth of Micro, Small and Medium Enterprises

Based on the table above, the test shows that the Credit Period with MSME Growth proves the value of t_{hitung} negative of -0.016. The test results by implementing mark substantiality or probability 5% or 0.05 so that obtained

t_{tabel} a number of -2.01669. or $t_{hitung} < t_{tabel}$ namely -0.016 $< 2,0166$. So proven from results

the substantiality of 0.987 means > 0.05 or H_0 accepted and H_a rejected. The analysis results show that, partially, the interest rate level does not have a substantial positive impact on MSME growth.

Test f

		Table Results Test f				
		ANOVA ^a				
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	178,662	2	89,331	4,863	,013 ^b
	Residual	771,534	42	18,370		
	Total	950,195	44			
a. Dependent Variable: <u>Pertumbuhan</u>						
b. Predictors: (Constant), Tingkat Suku Bunga, <u>Jangka Waktu Kredit</u>						

Source : Processed by Researchers, 2025

From the table, f_{hitung} is produced amounting to 4,863. The value of f_{tabel} at a probability level of 5% can be interpreted as 4.067. So we get $f_{hitung} > f_{tabel}$ and substantiality 0,000 < 0.05 or H_0 rejected and H_a accepted. Or considered long term Credit time and interest rate when measured simultaneously have substantial implications on the growth of MSMEs.

Coefficient of Determination

Table Results Test Coefficient Determination

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,434 ^a	0,188	0,149	4,28601	1,937
a. Predictors: (Constant), Tingkat Suku Bunga, <u>Jangka Waktu Kredit</u>					
b. Dependent Variable: <u>Pertumbuhan</u>					

Source : Processed by Researchers, 2025

Table 3.7 yields a coefficient of determination of 0.188, or 18.8%. This means that the loan term and interest rate can explain MSME growth by 18.8%. The remaining 81.2% is explained by other factors outside this study.

DISCUSSION

Implications Term Time Credit on Growth Business Micro Small and Intermediate

The results of the study prove that the credit period has substantial positive implications. on growth MSMEs. Things it is proven with substantiality or 5% probability or 0.05 then obtained value t_{tabel} a total of 2.01669. Therefore the result of the value of t_{hitung} is obtained $> t_{tabel}$ namely $2.305 < 2.0166$. Therefore, it can be concluded that the credit term has substantial positive implications, which indicates that when the credit term increases, the growth of MSMEs will also increase, likewise when the credit term decreases, it will result in a decline in MSME growth.

This study will indicate that the longer the credit period given, the by Institution financing to MSMEs will cause A significant increase for MSMEs in expanding their businesses is due to the longer credit terms, which provide flexibility for MSMEs in paying their obligations. This will lighten the cash flow burden. This allows funds to be allocated to other operational activities, such as addition of raw materials and market expansion.

Implications Level Ethnic group Flower on Growth Business Micro Small and Intermediate

The study results show that interest rates do not have substantial positive implications for MSME growth. Given evidence from the substantiality results or a probability of 5% or 0.05, the value of t_{tabel} is obtained. amounting to -2.01669. Therefore, the result obtained is the value $t_{hitung} < t_{tabel}$ namely $-0.016 < 2.0166$ or it means if Level Interest rates do not contain substantial positive implications, which indicates that when interest rates increase, they do not contribute directly to the growth of MSMEs, and when they decrease, they do not have a direct effect on the growth of MSMEs.

This proves that interest rate changes don't have an immediate effect because most MSMEs prioritize easy access to credit over high interest rates. In other words, as long as financing is available and the application process is straightforward, businesses will continue to borrow, even at relatively high interest rates.

Implications of Credit Term and Interest Rate Levels Simultaneously on the Growth of Micro, Small and Medium Enterprises

The results of the simultaneous test produce if f_{hitung} a total of 4,863. Then f_{tabel} at a probability level of 5% or 4.067. Then we get $f_{hitung} > f_{tabel}$ and the substantial value produced in the test is $0.000 < 0.05$ or is interpreted as H_0 rejected and H_a accepted. Therefore, it can be said that both independent variables simultaneously have a substantial positive impact on MSME growth. Based on the coefficient of determination values resulting from testing the variables Credit Term (X1) and Interest Rate (X2), it can explain MSME Growth (Y) by 18.8%. This indicates that 81.2% of Return on Assets (Y) can be explained by other variables outside this research.

Simultaneously, the test results show that loan terms and interest rates simultaneously impact MSME growth. This study explains that these two variables cannot be separated in examining the dynamics of MSME growth. The combination of adequate loan tenors and competitive interest rates

creates a healthy financing environment. In such conditions, business actors have certainty in financial planning, the ability to maintain liquidity, and the opportunity to undertake medium-term productive investments .

CONCLUSIONS

Based on the results of the analysis and discussion, this study concludes that credit term has a positive and significant effect on the growth of Micro, Small, and Medium Enterprises (MSMEs), indicating that longer and more flexible loan periods provide MSMEs with greater financial flexibility to manage cash flow and allocate funds toward productive business activities. In contrast, interest rates do not show a significant effect on MSME growth, suggesting that MSMEs tend to prioritize access to financing over the cost of borrowing. However, when tested simultaneously, credit term and interest rate jointly have a significant effect on MSME growth, demonstrating that appropriate loan policies combined with competitive interest rates can create favorable financing conditions to support MSME development. Nevertheless, the contribution of these variables remains relatively low at 18.8%, implying that MSME growth is also influenced by other factors such as managerial capability, product innovation, marketing strategies, business digitalization, and broader macroeconomic conditions.

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