

The Influence of Own Capital, Loan Capital, and Length of Business on the Income of MSMEs in Central Java.

Lidya Roes Herliyanawati ¹, Nina Woelan Soebroto ^{1*}, Omofolasaye Mirasanti Wahyuni ¹

¹ Politeknik Negeri Semarang, Indonesia

*Corresponding Author: woelansoebrotonina@polines.ac.id

Abstract

This study aims to analyze the effect of own capital, loan capital, and length of business on the income of Central Java MSMEs (Micro, Small and Medium Enterprises) both simultaneously and partially. Data was collected through a questionnaire method on 100 respondents of Central Java MSMEs. The data analysis model uses Multiple Linear Analysis. While the data analysis technique uses the t statistical test, the F test, and the coefficient of determination (R²) test. The results of this study indicate that the variables own capital, loan capital, and length of business simultaneously have a positive and significant effect on the income of Central Java MSMEs. The results of research partially show that the variables of own capital, loan capital, and length of business have a positive and significant effect on income of Central Java MSMEs.

Keywords: *Equity, Borrowed Capital, Business Duration, Reven.*

1. Introduction

MSMEs are an important sector of the Indonesian economy because they are able to absorb labor, encourage economic growth, and improve community welfare. According to Listyaningsih & Alansori (2020), MSMEs also contribute to tax revenue, exports, and entrepreneurial innovation. The government continues to encourage the empowerment of MSMEs because of their potential in driving the local resource-based economy (Purnomo et al., 2020). Well-managed MSMEs have proven to be able to survive even during a crisis, thus becoming the backbone of the national economy. Revenue is a key indicator of the success of MSMEs, as it is directly related to the ability of the business to survive and thrive. Revenue MSMEs generally come from the sale of goods or services, and are used to cover operational costs and generate profits (Fadhilani & Ayu, 2017). The level of income also reflects the welfare of business actors and can be used to assess the health of the regional and national economy (Fitriza, 2020).

In Central Java, MSMEs play an important role in the regional economic structure. Data from the Central Java Regional House of Representatives (2025) noted that out of a total business units, around 90% were micro businesses, 8.5% were small businesses, and businesses, around 90% are micro enterprises, 8.5% are small enterprises, and 0.94% are medium enterprises. The province is even among the top five regions with the highest economic growth nationally, at 4.5%. economic growth nationally, which amounted to 4.0%. MSME contribution to Gross Domestic Product (GDP) is predicted to reach 63% by 2025 (Alokop.id, 2025), signaling the sector's strategic role in post-pandemic economic recovery and digital transformation. However, MSMEs are faced with various challenges, one of which

limited capital. Many MSME actors have difficulty accessing formal financing due to strict requirements, such as collateral (Pemprov Jateng, 2025). As a result, Most MSMEs only rely on their own capital, which is limited in number. This capital limitation hampers the increase in production capacity, business development, and optimal income generation. In addition, low financial literacy, limited human resources, and lack of infrastructure and technology support are also constraints that are still often encountered (Wijaya, 2017).

Previous research shows that own capital, loan capital, and length of business are factors that can affect MSME income. Own capital usually comes from personal funds, savings, or grants, and provides flexibility without the burden of debt (Edward et al., 2023). Research by Hermawan et al. (2024), Yunus (2021), and Lapu et al. (2023) show a positive and significant effect of own capital on MSME income, although there are studies such as Yasnida et al. (2024) that show otherwise.

Borrowed capital from financial institutions can also increase income as it helps with business expansion and investment in operations (Boudreaux et al., 2021). However, the use of loans requires good financial management so as not to cause excessive financial burden. Meanwhile, business duration is considered to benefit in terms of experience, business relationships, and better risk management capabilities, which in turn provide better risk management, which in turn has a positive impact on income.

Sufficient capital allows MSMEs to increase the scale of production, such as buying raw materials in large quantities, which has the potential to increase revenue (Mardiyatmo, 2008). The influence of own capital variables on MSME income, supported by the results previously studied by Hermawan et al., (2024), Lapu et al., (2023), Yunus (2021), and Saefullah et al. (2023). The results of this study shows that the own capital variable has a significant influence on MSME income.

Borrowed capital is capital that generally comes from outside parties, usually in the form of loans. Utilization of this capital to finance business (Kasmir, 2017). The influence of the loan capital variable on MSME income, supported by the results of previous research by Lapu et al., (2021), Saefullah et al., (2023), and Yunus (2021). The results of this study show that the loan capital variable has a significant effect on MSME income (Kasmir, 2017). The results of these studies show that the loan capital variable has a significant influence on MSME income.

Length of business is the time span that a business actor has in maintaining his business (Setiaji and Yunus, 2021) maintaining his business (Setiaji and Fatuniah, 2018). The influence of the variable length of business on MSME income, supported by the results of previous research conducted by Hermawan et al., (2024), Lapu et al., (2023), Giyona & Utami (2024), Ferayani & Wijayanti (2023). The study shows that the variable length of business variable has a significant effect on MSME income. Given the importance of these three factors, this study was conducted to analyze the influence of equity, borrowed capital, and business tenure on MSME income in Central Java Province in 2025. This study provides an empirical overview of the most important factors contributing to increased MSME income and serve as a basis for policymakers' considerations in designing more targeted empowerment programmes.

2. Methods

The research method used in this study is a quantitative method that aims to determine the effect between the independent variables, namely own capital, loan capital, and length of business on the dependent variable, namely MSME income. The population of this study were all MSME actors in the Central Java region, while the determination of the number of samples was carried out using the Lemeshow formula to match the proportion of respondents needed. The data used consisted of primary data obtained through

distributing questionnaires to respondents, as well as secondary data collected from literature, journals, and other official sources. The research instrument was prepared using a Likert scale to measure respondents' perceptions of each variable indicator. Before data analysis is carried out, the instrument is tested for validity and reliability. Furthermore, the data were analyzed through the classical assumption test which includes normality, multicollinearity, and heteroscedasticity tests, then continued with multiple linear regression analysis to see the effect of independent variables simultaneously and partially on the dependent variable.

Hypothesis testing is done with the F test and t test at a significance level of 5% ($\alpha = 0.05$). Based on extant research, the hypotheses used in this study are:

H1: Own Capital, Loan Capital, Length of Business simultaneously has a positive and significant effect on the income of Central Java MSMEs. Central Java.

H2: Own capital partially has a positive and significant effect on the income of Central Java MSMEs income of Central Java MSMEs.

H3: Loan Capital partially has a positive and significant effect to the income of Central Java MSMEs.

H4: Length of Business partially has a positive and significant effect on the income of Central Java MSMEs income of Central Java MSMEs.

3. Results

3.1. Respondent Overview

The respondents in this study were 100 MSMEs. Based on data obtained from questionnaires distributed via Google Forms, the majority were women (67%). The most common type of business was culinary (42%). The most common location was Semarang (35%). The most common location was more than five years.

3.2. Validity Test

Table 1. *Validity Test Results*

Variable	Indicator	r_{hitung}	r_{tabel}	Sig.
Own Capital	X _{1.1}	0,672	0,196	0,000
	X _{1.2}	0,666	0,196	0,000
	X _{1.3}	0,748	0,196	0,000
	X _{1.4}	0,767	0,196	0,000
	X _{1.5}	0,587	0,196	0,000
Loan Capital	X _{2.1}	0,731	0,196	0,000
	X _{2.2}	0,610	0,196	0,000
	X _{2.3}	0,663	0,196	0,000
	X _{2.4}	0,689	0,196	0,000
	X _{2.5}	0,760	0,196	0,000
Length of Business	X _{3.1}	0,808	0,196	0,000
	X _{3.2}	0,747	0,196	0,000
	X _{3.3}	0,630	0,196	0,000
	X _{3.4}	0,755	0,196	0,000
	X _{3.5}	0,757	0,196	0,000
Income MSME _s	Y _{1.1}	0,558	0,196	0,000
	Y _{1.2}	0,754	0,196	0,000
	Y _{1.3}	0,723	0,196	0,000
	Y _{1.4}	0,724	0,196	0,000
	Y _{1.5}	0,720	0,196	0,000

Source: processed data (2025)

From the results of table 1, all indicators in this research variable get a significant value <0.05 and the value of $r_{count} > r_{table}$ obtained a value of 0.196, so that it can be concluded that significant value <0.05 and the value of $r_{count} > r_{table}$ obtained a value of 0.196, so that it can be concluded that all variables are declared valid.

3.3. Reliability Test

Table 2. Reliability Test Results

Indicator	Cronbach's Alpha	Criteria	N of item
Own Capital	0,725	0,70	5
Loan Capital	0,737	0,70	5
Length of Business	0,793	0,70	5
Income MSMEs	0,738	0,70	5

Source: processed data (2025)

Based on table 2, all indicators on this research variable get a Cronbach's Alpha value exceeding the standard of 0.70 from the research standard research standard. Therefore, all variables are declared to have a good level of reliability good level of reliability.

3.4. Normality Test

Table 3. Normality Test Results

Parameter	Nilai
Amount of data (N)	100
Signifikansi Asymptotic	0,055
Signifikansi Monte Carlo	0,404

Source: processed data (2025)

Based on table 3, it can be seen that the Kolmogorov-Smirnov test results (K-S) test with the exact monte carlo approach has a significance value of 0.404. Therefore it can be stated that the data is normally distributed, because the significance value of the exact normal distribution, because the significance value of exact monte carlo > 0.05

3.5. Multicollinearity Test

Table 4. Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Own Capital	.567	1.765
	Loan Capital	.488	2.049
	Length of Business	.472	2.121
a. Dependent Variable: Income MSMEs			

Source: processed data (2025)

Based on table 4, it can be seen that all of these variables have a tolerance value above 0.10 and a VIF value below 10 above 0.10 and the VIF value is below 10. The conclusion is that the regression model used does not experience multicollinearity problems regression model used does not experience

multicolonierity problems.

3.6. Heteroscedasticity Test

Table 5. *Heteroscedasticity Test Results*

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig
		B	Std. Error	Beta		
1	(Constant)	2.345	.870		2.696	.008
	Own Capital	-.020	.060	-.044	-.329	.743
	Loan Capital	-.024	.060	-.058	-.404	.687
	Length of Business	-.036	.051	-.103	-.702	.484
a. Dependent Variable: Income MSME _s						

Source: processed data (2025)

Based on table 5 test results using the glejser test that has been done, all variables show a significance level above 0.05, it can be concluded that there are no heteroscedasticity symptoms there are symptoms of heteroscedasticity.

3.7. Multiple Linear Regression Analysis Test

Table 6. *Multiple Linear Regression Analysis Test Results*

Coefficients ^a		
Model		Unstandardized Coefficients
		B
1	(Constant)	2.489
	Own Capital	.300
	Loan Capital	.371
	Length of Business	.185
a. Dependent Variable: Income MSME _s		

Source: processed data (2025)

Based on table 6, it has produced a coefficient value that can be used to compiling multiple linear regression equations can be concluded:

Central Java MSME Revenue = 2.489 + 0.300 Own Capital + 0.371 Loan Capital + 0.185 Length of Business + e.

- The constant value of the multiple linear regression equation of 2.489 is positive (+). This means that the income of Central Java MSMEs is 2,489 with the assumption that own capital, loan capital, and length of business are zero (0).
- 2. The coefficient value is 0.300 and positive, meaning that if there is an increase of 1 unit of own capital then the income of Central Java MSMEs will increase by 0.300 with the assumption that the variables of loan capital and length of business are fixed, loan and length of business are constant.
- The coefficient value is 0.371 and positive, meaning that if there is an increase of 1 unit of capital loan, the income of Central Java MSMEs will increase by 0.371 with the assumption that the variables of own capital and length of business are fixed, own capital and length of business are constant.
- The coefficient value is 0.185 and positive, meaning that if there is an increase of 1 unit of length of business then the income of Central Java MSMEs will increase by 0.185 with the assumption that the variables of own capital and loan capital are fixed, own capital and loan capital variables are fixed.

3.9. F Statistical Test

Table 7. F Statistical Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	254.044	3	84.681	47.779	.000 ^b
	Residual	170.146	96	1.772		
	Total	424.190	99			

Source: processed data (2025)

Based on table 7, it is obtained that $f_{count} = 47.779 > f_{table} = 2.700$ or $significance = 0.000 < 0.05$, so that Own Capital, Loan Capital, and Length of Business simultaneously have a positive and significant effect on the income of MSMEs in Central Java.

3.10. Coefficient of determination Test

Table 8. Coefficient of determination Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774 ^a	.599	.586	1.331

Source: processed data (2025)

Based on table 8, the Adjusted R Squarre value is 0.586 or 58.6%. This means that the variables Own capital, loan capital, and length of business have an influence on the income of Central Java MSMEs by 58.6% and the remaining 41.4% is influenced by other factors. Income of Central Java MSMEs by 58.6% and the remaining 41.4% which is influenced by other variables not discussed in this study.

3.11. T Statistical

Table 9. T Statistical Test Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.489	1.312		1.897	.061
	Own Capital	.300	.091	.283	3.293	.001
	Loan Capital	.371	.090	.382	4.126	.000
	Length of Business	.185	.077	.225	2.389	.019

Source: processed data (2025)

From the results of table 9 are the results to determine the effect of the variables:

- The results of the own capital variable $t_{count} = 3.293 > t_{table} = 1.984$ or $significance = 0.001 < 0.05$. Then hypothesis 1 is accepted.
- The results of the loan capital variable $t_{count} = 4.126 > t_{table} = 1.984$ or $significance = 0.000 < 0.05$. Then hypothesis 2 is accepted.

- The result of the tcount of the variable Length of Business = 2.389 > ttable = 1.984 or significance 0.019 < 0.05. Then hypothesis 3 is accepted.

4. Conclusion

Based on the research results, it can be concluded that the variables of equity, borrowed capital, and business duration partially have a positive and significant influence on the income of Central Javanese MSMEs. The loan capital variable has the largest positive and significant impact on the income of Central Java MSMEs. Indicators for this variable include loan needs and loan benefits. This indicates that access to loans can be used to increase business capital, expand businesses, and meet operational needs, which can increase revenue.

MSMEs can utilize loan capital to increase revenue but must consider their repayment capacity. The equity capital variable has the second positive and significant impact on the income of Central Java MSMEs. This indicates that the use of equity capital by MSMEs can increase revenue. MSMEs are advised to strengthen their internal capital structure through sound financial planning, strict financial management, and investment of profits to support business growth. Length of business is the third variable with a positive and significant impact on Central Java MSMEs. Indicators for this variable include length of business, suitability to skills, and business continuity. This shows that the longer a business has been running, the greater the experience and business network it has, which can increase revenue. Therefore, it is important for new MSMEs to build a strong business foundation from the start, such as training in basic business management and financial record-keeping. Future researchers are expected to add other relevant independent variables to explain MSME revenue. They are expected to expand the research scope to include all of Indonesia.

5. References

- Alansori, A., & Listyaningsih, E. (2020). *Kontribusi UMKM terhadap kesejahteraan masyarakat*. Yogyakarta.
- Alifiana, D., Susyanti, J., & Dianawati, E. (2021). Pengaruh modal usaha, lama usaha dan jam kerja terhadap pendapatan usaha pada pelaku ekonomi kreatif di masa pandemi Covid-19 (Sub sektor fashion-kuliner Malang Raya). *Jurnal Ilmiah Riset Manajemen*, 10(4).
- Amalia, M. (2018). Analisis pengaruh pelatihan, bantuan modal dan cara pengelolaan usaha terhadap pendapatan usaha mikro kecil dan menengah.
- Fitriza. (2020). Pengaruh penyaluran Kredit Usaha Rakyat (KUR), modal sendiri, dan jumlah tenaga kerja terhadap pendapatan UMKM debitur Bank BRI Unit Simpang Amplas. Program Studi Ekonomi Pembangunan, Fakultas Ekonomi dan Bisnis.
- Ghozali, I. (2016). *Aplikasi analisis multivariete SPSS 23*. Semarang: Penerbit Universitas Diponegoro.
- Hermawan, N. A., Mulyadi, D., & Sandi, S. P. H. (2024). The effect of own capital, borrowed capital, and length of business on MSME income in East Karawang District. *Journal of Economic, Business and Accounting*, 7(2), 2597–5234.
- Hidayanti, S. (2021). Pengaruh modal dan pinjaman terhadap pendapatan KUD.
- Lapu, M. U., Harmadji, D. E., & Perdana, S. (2023). Pengaruh modal sendiri, modal pinjaman, dan lama usaha terhadap pendapatan UMKM di Kabupaten Malang (Studi pada UMKM Pedang Desa Jatisari). Universitas Wisnuwardhana Malang.
- Pamungkas, H. A., & Hidayatulloh, A. (2019). Faktor penentu perkembangan UMKM gerabah Kasongan Bantul Yogyakarta. *Jurnal Inovasi*, 15(1).
- Puji Riswana, P., Woelan Soebroto, N., & Suriana, I. (2019). Pengaruh dana pihak ketiga (DPK), capital adequacy ratio (CAR), dan return on assets (ROA) terhadap penyaluran kredit (studi kasus pada Bank BUMN periode 2011–2018). *Jurnal Tugas Akhir Mahasiswa Akuntansi Poltekba (JMAP)*, 1–9.
- Ramli, R. R., & Setiawan, S. R. D. (2024). Peningkatan akses pembiayaan UMKM di Kota Semarang melalui pendampingan manajemen usaha berbasis teknologi.

Herliyanawati et al. (2025). *The Influence of Own Capital, Loan Capital, and Length of Business on the income of MSMEs in Central Java*

- Rusmusi, I. M. P., & Maghfira, A. N. (2018). Pengaruh modal, jam kerja dan lama usaha terhadap pendapatan pedagang di Pasar Ikan Hias Mina Restu Purwokerto Utara. *Jurnal Ekonomi, Bisnis, dan Akuntansi*, 20(4).
- Saputra, D. H., Sutiksno, D. U., Kusuma, A. H. P., Romindo, R., Wahyuni, D., Purnomo, A., & Simarmata, J. (2020). *Digital marketing: Komunikasi bisnis menjadi lebih mudah*. Yayasan Kita Menulis.
- Setiaji, K., & Fatuniah, A. L. (2018). Pengaruh modal, lama usaha dan lokasi terhadap pendapatan pedagang pasar pasca relokasi. *Jurnal Pendidikan Ekonomi dan Bisnis (JPEB)*, 6(1), 1–14.
- Sunyoto, D. (2014). *Konsep dasar riset pemasaran & perilaku konsumen*. Yogyakarta: CAPS.
- Suryani, S. I., Septiawati, R., & Arimurti, T. (2024). Pengaruh modal sendiri, Kredit Usaha Rakyat (KUR), teknologi, lama usaha dan lokasi usaha terhadap pendapatan usaha (studi kasus pada usaha mikro di Kecamatan Majalaya). *SEIKO: Journal of Management & Business*, 7(1), 1476–1492.
- Yunus, Y. A. (2021). Pengaruh modal sendiri dan modal pinjaman terhadap peningkatan pendapatan usaha mikro kecil dan menengah. *YUME: Journal of Management*, 4(1), 231–238.

For instructions on how to order reprints of this article, please visit our website:
<https://ejbm.apu.edu.my/> | © Asia Pacific University of Technology and Innovation