

***THE EFFECT OF FINANCIAL INCLUSION, PAYMENT DIGITALIZATION,
AND FINANCIAL MANAGEMENT ON THE INCOME OF MSME ACTORS
(MICRO, SMALL, AND MEDIUM ENTERPRISES) IN MANGUHARJO
DISTRICT, MADIUN CITY***

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Abstrak

Usaha Mikro Kecil dan Menengah (UMKM) memegang peranan krusial dalam perekonomian Indonesia, menyumbang sekitar 60,3% terhadap Produk Domestik Bruto (PDB) dan menyediakan lebih dari 97% lapangan kerja di sektor swasta (Sungkawati *et al.*, 2016). Penelitian ini dilakukan pada pelaku UMKM di Kecamatan Manguharjo Kota Madiun. Penelitian ini menggunakan data primer yaitu kuesioner yang disebar kepada responden. Jumlah sampel dalam penelitian ini adalah 130 responden. Penelitian ini menggunakan SPSS Versi 21. Hasil Penelitian Inklusi keuangan terbukti berpengaruh terhadap pendapatan UMKM di Kecamatan Manguharjo Kota Madiun dengan t hitung 6,154 dengan t tabel sebesar 1,9785, serta koefisien sig = 0.000 < 0.05. *Digitalisasi pembayaran* terbukti berpengaruh terhadap pendapatan UMKM di Kecamatan Manguharjo Kota Madiun dengan t hitung 6,541 dengan t tabel sebesar 1,9785, serta koefisien sig = 0.000 < 0.05. Manajemen keuangan terbukti berpengaruh terhadap pendapatan UMKM di Kecamatan Manguharjo Kota Madiun dengan t hitung 3,066 dengan t tabel sebesar 1,9785, serta koefisien sig = 0.003 < 0.05. Inklusi keuangan, *digitalisasi pembayaran*, dan manajemen keuangan terbukti berpengaruh secara simultan terhadap pendapatan UMKM di Kecamatan Manguharjo Kota Madiun dengan koefisien sig = 0.000 < 0.05. **Kata Kunci:** Inklusi Keuangan, UMKM, Digitalisasi Pembayaran.

Abstract

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in Indonesia's economy, contributing approximately 60.3% to the Gross Domestic Product (GDP) and providing over 97% of private-sector jobs (Sungkawati et al., 2016). This study was conducted among MSMEs in Manguharjo Subdistrict, Madiun City. This study utilized primary data in the form of questionnaires distributed to respondents. The sample size for this study was 130 respondents. The study employed SPSS Version 21. The results of the financial inclusion study

showed a significant effect on the income of MSMEs in Manguharjo District, Madiun City, with a t-value of 6.154 and a t-table value of 1.9785, as well as a coefficient of sig = 0.000 < 0.05. Digitalisasi pembayarans have been proven to influence the income of SMEs in Manguharjo Subdistrict, Madiun City, with a calculated t-value of 6.541 and a table t-value of 1.9785, along with a significance coefficient of sig = 0.000 < 0.05. Financial management has been proven to influence the income of MSMEs in Manguharjo District, Madiun City, with a t-value of 3.066, a critical t-value of 1.9785, and a significance coefficient of 0.003 < 0.05. Financial inclusion, digitalisasi pembayarans, and financial management have been proven to simultaneously influence the income of MSMEs in Manguharjo District, Madiun City, with a significance coefficient of 0.000 < 0.05.

Keywords: Financial Inclusion, MSMEs, Digitalisasi pembayaran

A. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in Indonesia's economy, contributing approximately 60.3% to the Gross Domestic Product (GDP) and providing more than 97% of employment in the private sector (Sungkawati et al., 2016). In this context, Manguharjo District, Madiun City, as one of the key economic centers, demonstrates significant potential for MSME development. However, according to Roesdiana et al. (2024), MSME actors in this area face various challenges that affect their growth and sustainability.

MSMEs have a strategic role in Indonesia's economic growth. This is evidenced by national economic data from 2013–2014, where MSMEs contributed IDR 5,440 trillion, absorbed 114.14 million workers, and attracted IDR 1,655.2 trillion in investment, with a total of 57.8 million business units (www.bi.go.id). The contribution of MSMEs in Indonesia is indisputable. According to Reni (2018), the business sector in Indonesia is dominated by MSMEs, which are highly resilient and capable of withstanding crises. The following data shows the number of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia from 2019 to 2023

Table 1. Number of MSMEs in Indonesia, 2019–2023

Tahun	Jumlah UMKM (dalam juta)
2019	65,47
2020	64
2021	65,46
2022	64,22
2023	66

(Sumber:www.Databoks.com)

This data shows that the number of MSMEs fluctuated during the period. In 2020, there was a 2.24% decrease in the number of MSMEs compared to the previous year, likely due to the impact of the COVID-19 pandemic. From the table above, it is evident that the number of MSMEs does not consistently increase each year, with a decline in 2020 followed by a recovery in the subsequent years. This indicates that MSMEs still require attention, particularly in terms of comprehensive management, especially regarding capital and financial management (Ginting & Ruzikna, 2024). Therefore, MSMEs in Indonesia still need government support to be able to compete in international markets (Winata, 2023).

Madiun City is one of the cities that supports the presence of MSMEs. According to data, in 2017 there were 23,276 MSME actors, and in 2018, there were 23,360 (Rahmawati, 2021). The breakdown of this data includes 20,941 micro enterprises, 2,196 small enterprises, and 223 medium enterprises, employing approximately 8,000 workers with a production value reaching IDR 65 billion per year (Rahmawati, 2021). These enterprises are spread across various sectors, including trade, industry, and services. The number of MSMEs in Madiun City is the highest in the Madiun residency area (www.madiuntoday.go.id)

One of the main issues that needs attention is inflation. According to data from BPS Madiun City, inflation in Madiun City fluctuates annually. The average inflation in Madiun City from 2018 to 2022, along with its impact on purchasing power, is presented in the following table:

Table 2. Inflation Rate in Madiun City

Tahun	Inflasi (%)	Dampak terhadap Daya Beli
2018	2,88%	Terjadi penurunan daya beli masyarakat akibat inflasi.
2019	2,72%	Daya beli masyarakat terganggu oleh peningkatan harga barang kebutuhan pokok.
2020	1,68%	Pandemi COVID-19 menyebabkan penurunan daya beli yang signifikan, terutama pada UMKM.
2021	1,75%	Daya beli masyarakat mulai pulih sedikit meski masih ada dampak dari pandemi.
2022	1,84%	Penurunan daya beli masyarakat terlihat akibat harga barang yang terus meningkat.

(Sumber: <https://madiunkota.bps.go.id/id>)

Based on Table 2 regarding the inflation rate, although inflation in Madiun City has decreased, this decline still affects the purchasing power of the community. This, in turn, impacts the income of MSMEs in Madiun City. Besides reduced purchasing power due to inflation, there are various other factors, including seasons, market demand, and economic conditions (Agustin et al., 2023). Despite the significant contribution of MSMEs to the local economy, many MSME actors still face limited access to formal financial services, such as credit, savings, and insurance (Hasibuan, 2024). This limitation hinders their ability to develop businesses and manage financial risks effectively. Several studies indicate that MSME income is influenced by at least three main factors: financial inclusion, payment digitalization, and financial management (Laziva & Atieq, 2024).

Financial inclusion is a key element in supporting MSME growth (Richard et al., 2024). Good access to financial products and services can strengthen the ability of MSMEs to invest and expand their businesses (Irman et al., 2021). The percentage levels of financial inclusion aspects among the population in Indonesia vary. According to data from the OJK (2023), the average level of financial inclusion in Indonesia is as follows:

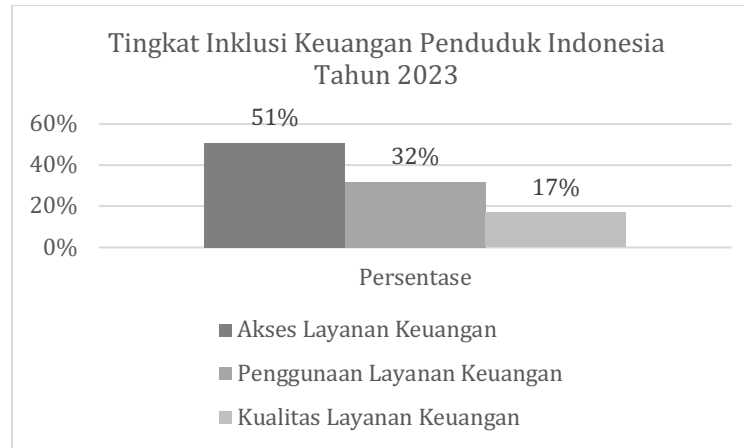


Figure 1 Financial Inclusion Rate of the Indonesian Population, 2023

(Sumber: ojk.go.id)

Based on the data in Figure 1, it can be seen that in 2023, the financial inclusion rate of the Indonesian population shows that 51% of the population has access to formal financial services, but only 32% use them actively (ojk.go.id). In Manguharjo District, the main challenge in improving financial inclusion lies in the use of digital payments. Although the adoption of digital payment methods is increasingly developing in some urban areas, in Manguharjo District, many people are not yet familiar with digital payment technologies, such as e-wallets, QR code payments, or transfers via mobile banking applications (Fadhillah & Wijaya, 2023).

Furthermore, according to Purnamasari & Asharie (2024), payment digitalization also offers significant opportunities for MSMEs to increase operational efficiency and expand their markets. According to data from the OJK, the number of digital payment users is recorded in the following graph.

Table 3. Number of Digital Payment Users in Madiun City, 2018–2022

Tahun	Kecamatan Taman	Kecamatan Kartoharjo	Kecamatan Manguharjo
2018	2,546	1,899	1,255
2019	2,876	2,189	1,294

Tahun	Kecamatan Taman	Kecamatan Kartoharjo	Kecamatan Manguharjo
2020	3,103	2,475	1,324
2021	3,517	2,742	1,426
2022	3,948	3,191	1,445

(Sumber: Data diolah, 2024)

From Table 3, it can be seen that Manguharjo District experienced the lowest increase in the number of digital payment users compared to other districts in Madiun City. In 2019, the increase in Manguharjo District was only around 3.11%, which was significantly lower than in other districts such as Taman District (12.94%) and Kartoharjo District (15.30%). In 2021, the increase in Manguharjo District was slightly higher, but still at 5.73%, far below other districts that showed a faster growth rate. In 2022, the increase declined again to 3.21%, indicating that the adoption of digital payments in Manguharjo District is progressing more slowly. With the advancement of digital payment technologies, such as e-wallets and mobile banking, MSMEs can benefit from faster transaction processes and reduced operational costs (Handayani & Soeparan, 2022). However, the use of these technologies in Manguharjo District still faces challenges, including low digital literacy and limited technological infrastructure. Nevertheless, payment digitalization can significantly contribute to increasing MSME income by improving efficiency, speed, and transaction security (Candra, 2024).

Furthermore, research by Wibowo et al. (2023) revealed that good financial management is key to MSME sustainability. In Manguharjo District, many MSME actors still have limitations in financial management skills. The lack of systematic financial recording and effective budget planning are some common weaknesses. With better financial management, MSMEs can control cash flow, plan investments, and make more strategic business decisions. Therefore, improving financial management capacity is crucial to help MSMEs increase income and sustain their businesses.

THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

Income

Income is one of the most important elements in the preparation of a company's income statement. According to Silviana & Adnan (2022), income has a significant impact on the overall life of a company; the higher the income obtained, the greater the company's ability to finance all expenditures and activities undertaken by the company or business actors.

Financial Inclusion

Financial inclusion is a crucial concept but is often not fully understood by the public. This term refers to efforts to ensure that all layers of society, including the underprivileged and low-income groups, have easy and affordable access to various financial services such as savings, credit, insurance, and other financial transactions. According to Setyawati et al. (2023), financial inclusion is a process that guarantees that vulnerable and low-income groups can obtain financial services at reasonable costs. The World Bank (2014) describes financial inclusion as the ability of individuals or groups to access formal financial products and services that are useful, affordable, and capable of meeting their needs responsibly and sustainably.

Payment Digitalization

Digital payment, commonly known as e-wallets, consists of two basic forms: computer networks and digital systems. Digital payment is a method of conducting transactions digitally, in which the payer and the recipient use a digital platform to send and receive money. The entire digital payment transaction process is carried out online (Nugrah Leksono Putri Handayani & Poppy Fitrijanti Soeparan, 2022).

Hypothesis Development

Based on the theoretical review, the research hypotheses are formulated as follows:

H1: Financial inclusion is hypothesized to affect the income of MSME actors in Manguharjo District, Madiun City.

H2: Payment digitalization affects the income of MSME actors in Manguharjo District, Madiun City.

H3: Financial management affects the income of MSME actors in Manguharjo District, Madiun City.

H4: There is a simultaneous effect of financial inclusion, payment digitalization, and financial management on the income of MSME actors in Manguharjo District, Madiun City.

B. RESEARCH METHOD

This study uses a quantitative method with primary data collected through Google Forms. The sample was selected using purposive sampling, totaling 384 respondents. The research instrument is a questionnaire using a Likert scale. In this study, data processing was carried out with the assistance of SPSS 21 software.

C. RESULTS AND DISCUSSION

Normalitas Test

Table 4 Normalitas Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		130
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	2,10480717
Most Extreme Differences	Absolute	,080
	Positive	,080
	Negative	-,043
Kolmogorov-Smirnov Z		,912
Asymp. Sig. (2-tailed)		,376

a. Test distribution is Normal.

b. Calculated from data.

Sumber: SPSS21, 2025

Based on the Kolmogorov-Smirnov test, the study found that the regression model has residuals that are normally distributed, as evidenced by the significance coefficient of 0.376, which is greater than 0.05

Multikolinieritas Test

Table 5 Multikolinieritas Test

Variabel Bebas Penelitian	Variance Influence Factor (VIF)	Keterangan
Literasi keuangan	1,172	Tidak terjadi multikolonieritas
Inklusi keuangan	1,288	Tidak terjadi multikolonieritas
Manajemen Keuangan	1,151	Tidak terjadi multikolonieritas

Sumber: SPSS21, 2025

Based on Table 5 above, it is known that the VIF value for the financial inclusion variable (X1) is 1.172, for the payment digitalization variable (X2) is 1.288, and for the financial management variable (X3) is 1.151. Since all VIF values obtained from the test are less than 10.00, it can be concluded that there are no symptoms of multicollinearity among the variables.

Heteroskedastistas Test

Table 6 Heteroskedastistas Test

Variabel Bebas Penelitian	$\geq \alpha$	Sig	Keterangan
Inklusi keuangan	0,05	0,290	Tidak Terjadi Heteroskedastisitas
Digitalisasi pembayaran	0,05	0,367	Tidak Terjadi Heteroskedastisitas
Manajemen Keuangan	0,05	0,362	Tidak Terjadi Heteroskedastisitas

Sumber: SPSS21, 2025

Based on Table 6, it is known that the probability for each variable is greater than 0.05 (alpha). Therefore, the decision is to accept H_0 , meaning that there are no symptoms of heteroscedasticity.

Parsial t Test

Table 7 Parsial t (t Test)

Variabel	t-hitung	t-tabel	Keputusan
Inklusi keuangan	6,154	1,9785	Hipotesis diterima

Digitalisasi pembayaran	6,541	1,9785	Hipotesis diterima
Manajemen Keuangan	3,066	1,9785	Hipotesis diterima

Sumber: Output SPSS

F (Simultan) Test

Table 8 F Test

Variabel	F-hitung	F-tabel	Sig	Keterangan
Inklusi keuangan, digitalisasi pembayaran, Manajemen keuangan	57,882	3,0675	0,000	Hipotesis diterima

Sumber Output: SPSS 2024

Referring to Table 8, the calculated F-value is 57.882, which exceeds the F-table value of 3.0675. Based on this result, it can be concluded that the third hypothesis, which states that financial inclusion, payment digitalization, and financial management simultaneously affect MSME income, is accepted.

DISCUSSION

- 1) The table shows that the calculated t-value for the financial inclusion variable is 6.154, which is greater than the t-table value (1.9785). This means the alternative hypothesis (H1) is accepted, indicating that financial inclusion has a significant impact on MSME income.
- 2) From the same table, the calculated t-value for the payment digitalization variable is 6.541, exceeding the t-table value (1.9785). This indicates that the second hypothesis (H2) is accepted, confirming that payment digitalization significantly affects MSME income.
- 3) The table also shows that the calculated t-value for the financial management variable is 3.066, which is higher than the t-table value (1.9785). This means the third hypothesis (H3) is accepted, proving that financial management significantly affects MSME income.

- 4) The calculated F-value is 57.882, exceeding the F-table value of 3.0675, indicating that financial inclusion, payment digitalization, and financial management simultaneously affect MSME income, and this hypothesis is accepted.

D. CONCLUSION

Financial inclusion is proven to affect MSME income in Manguharjo District, Madiun City. Payment digitalization is proven to affect MSME income in Manguharjo District, Madiun City. Financial management is proven to affect MSME income in Manguharjo District, Madiun City. Financial inclusion, payment digitalization, and financial management are proven to simultaneously affect MSME income in Manguharjo District, Madiun City

E. SUGGESTIONS

For future researchers, the results of this study show that 58% of the variation in the dependent variable (MSME income) can be explained by the independent variables (financial inclusion, payment digitalization, and financial management). It is suggested that future research can expand on this study by examining other factors that may influence MSME income. For example, researchers can investigate additional variables related to financial inclusion, payment digitalization, and financial management. Future researchers can also use alternative methods in studying MSME income and explore other factors that may affect it.

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