# The Role of Microloans, Informal Employment, and Income in Reducing Poverty in Eastern Indonesia

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***ABSTRACT***

*This study analyzes the influence of microloans, the availability of informal employment, and income levels on poverty rates in the Eastern Indonesia region. Using panel data from 13 provinces over the 2020–2022 period and a Random Effect Model regression method, the results show that microloans and the availability of informal employment significantly contribute to reducing poverty, while income levels do not have a significant partial effect. However, collectively, the three variables have a significant impact on poverty rates. These findings highlight the importance of expanding access to microloans and improving the quality of informal employment to support poverty alleviation efforts. Microloans can help low-income individuals start or grow small businesses, while the informal sector provides job opportunities for those not absorbed into the formal labor market.*

***Keywords****: Income Level, Informal Employment, Microloans, Poverty Rate*

***ABSTRAK***

*Penelitian ini menganalisis pengaruh pinjaman mikro, ketersediaan lapangan kerja informal, dan tingkat pendapatan terhadap tingkat kemiskinan di wilayah Indonesia Timur. Menggunakan data panel dari 13 provinsi selama periode 2020-2022 dan metode regresi Model Efek Acak, hasilnya menunjukkan bahwa pinjaman mikro dan ketersediaan lapangan kerja informal berkontribusi signifikan dalam mengurangi kemiskinan, sedangkan tingkat pendapatan tidak memiliki efek parsial yang signifikan. Namun, secara kolektif, ketiga variabel tersebut memiliki dampak yang signifikan terhadap tingkat kemiskinan. Temuan ini menyoroti pentingnya memperluas akses ke pinjaman mikro dan meningkatkan kualitas pekerjaan informal untuk mendukung upaya pengentasan kemiskinan. Pinjaman mikro dapat membantu individu berpenghasilan rendah memulai atau menumbuhkan usaha kecil, sedangkan sektor informal memberikan peluang kerja bagi mereka yang tidak terserap ke pasar tenaga kerja formal.*

***Kata kunci****: Tingkat Pendapatan, Pekerjaan Informal, Pinjaman Mikro, Tingkat Kemiskinan*

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## INTRODUCTION

Poverty affects billions of people worldwide and is a serious and pervasive issue in the modern world. While poverty can be defined in a variety of ways, it is essentially more than simply the lack of resources. Lack of access to good health care, high-quality education, and chances to fully participate in social and economic activities are all considered forms of poverty. Poverty strategies, according to this paradigm, seek to alleviate material poverty and eliminate structural obstacles that prevent people and communities from reaching their full potential (Yusriadi et al., 2023; Hasnakamilah & Purnomo, 2023). Since poverty is still a concern in Indonesia, reducing it is always given top priority in government programs and initiatives (Sugiharti et al., 2023a). From the latest data released by BPS in 2023, 25.9 million people are categorized as poor in Indonesia. In rural regions, the Eastern Indonesia Region continues to have the greatest poverty rate. Further, BPS released data on the percentage of poor people (P0) by province in 2023.

The Eastern Region of Indonesia consistently records the highest poverty rates in the country. In 2023, Papua ranked first with 26.03% or 915.15 thousand people living in poverty, followed by West Papua (20.49%), East Nusa Tenggara (19.96%), and Maluku (16.42%). In contrast, provinces like DKI Jakarta, South Kalimantan, and Bali reported the lowest poverty rates, at 4.44%, 4.29%, and 4.25%, respectively. Numerous studies on poverty in Indonesia have applied diverse methods, such as the spell technique by Dartanto et al. (2020) and Moeis et al. (2020), Poverty Gap Squared by Bella and Dartanto (2018) and Taufiq and Dartanto (2020), and employment ratios by Mahadevan et al. (2017) and van Leeuwen and Földvári (2016). However, only a limited number of studies utilize a component-based approach, such as those by Dartanto et al. (2020). Later research by Purwono et al. (2021) and Sugiharti et al. (2023b) employed the Equally Distributed Equivalent (EDE) method using district- and subgroup-level poverty lines, highlighting that transient poverty in Indonesia is more prevalent than chronic poverty (Mai & Mahadevan, 2016).

Agustiya et al. (2024), drawing from Sharp's framework, identify three core economic causes of poverty: unequal resource ownership, low-quality human capital (due to education, discrimination, or genetics), and unequal access to capital. Addressing capital access, microloans are considered a potential solution. These financial services target individuals or small businesses unable to access conventional credit due to insufficient collateral or credit history. While microloans are meant to foster economic productivity and improve living standards, their real impact in Eastern Indonesia remains insufficiently explored.

Informal employment is another key dimension of poverty. The sector often lacks protections and is highly vulnerable to external shocks like the COVID-19 pandemic (Purwaningsih et al., 2022). Informal workers typically women, the elderly, less educated, rural residents, and untrained individuals were especially hard-hit (Axellina, 2020). Many shifted to alternative informal jobs such as online retail or courier services (Prasojo, 2022). Although the informal sector plays a crucial economic role, its instability and lack of protection require urgent attention (Axellina, 2020). Given the heavy reliance of Eastern Indonesia's population on informal work, analyzing both informal and formal employment is vital for understanding poverty. Income level is also a key indicator of household welfare. However, it is shaped by multiple factors including poverty rates, legal housing frameworks, empowerment programs, and corruption. Regional poverty line variations complicate measurement (Nur, 2022). Income levels can be enhanced through proper legal frameworks by Roestamy (2018), community-based programs by Rahmida and Ridwan (2023), and anti-corruption efforts by Iskandar (2018).

Previous studies link microloans, informal employment, and income to poverty. Feder and Yu (2020) emphasize the need for productive employment. São Paulo (2018) highlight microloans' positive role in boosting income and rural welfare. Although government credit schemes like People's Effort Credit support micro-enterprises, their reach is still limited (Aristanto et al., 2020). Moreover, increased income enhances access

to financial services (Susilowati & Leonnard, 2019). This study fills the gap by examining the joint influence of microloans, income, and informal employment on poverty in Eastern Indonesia, aiming to provide evidence-based recommendations for effective policy interventions.

## LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

### The Effect of Micro Loans on Poverty Rates

Microloans are widely acknowledged as a promising tool in poverty alleviation efforts. According to Suratini (2018), microloans provide access to capital that allows low-income individuals to initiate or expand small-scale businesses. This access is particularly crucial in regions like Eastern Indonesia, where many communities are underserved by formal financial institutions. Through microloans, individuals who lack collateral, credit history, or formal income streams can begin economic activities that generate revenue and support household needs. The mechanism through which microloans reduce poverty lies in their potential to increase income, self-employment, and economic independence. As highlighted by Jayawarsa et al. (2023), poverty stems in part from a lack of opportunity and financial resources. Microloans address these gaps directly by providing the poor with financial means to participate in economic production. Although challenges remain regarding the sustainability and repayment of microloans, their role in fostering micro-enterprises makes them a critical intervention, especially in isolated and rural provinces such as Papua and East Nusa Tenggara. Furthermore, the impact of microloans can be maximized through complementary programs such as entrepreneurial training and mentoring. This ensures borrowers can utilize the funds productively. As noted by Metcalf (2019), long-term poverty reduction requires more than income it requires equitable access to tools that build capacity and resilience.

H1: Micro Loans has a significant effect on Poverty Rates.

### The Effect of Informal Employment Availability on Poverty Rates

Informal employment plays a significant role in Indonesia's labor market, particularly in regions like Eastern Indonesia where formal employment opportunities are scarce. According to Hendro et al. (2021), informal employment refers to jobs that operate outside government regulations, offering no legal protection or formal benefits. In Indonesia, 60.5% of the workforce is employed informally, with high concentrations in urban and peri-urban areas (Purwaningsih et al., 2022). The relationship between informal employment and poverty is complex. On the one hand, the informal sector provides essential income for millions of Indonesians who would otherwise be unemployed. On the other hand, its unregulated nature makes workers highly vulnerable to income instability, lack of insurance, and poor working conditions. This is particularly relevant in Eastern Indonesia, where informal work may be the only viable employment option due to limited industrial or government sectors.

Purwaningsih et al. (2022) emphasize that during economic shocks such as the COVID-19 pandemic informal workers were among the hardest hit, experiencing job losses and reduced income. Many turned to informal digital work, such as online sales or delivery services, as a coping mechanism. Despite these challenges, the availability of informal work can reduce poverty in the short term by preventing total unemployment. Thus, while informal employment alone may not eradicate poverty, its availability provides a critical buffer for low-income households. Improving working conditions and incorporating basic protections in the informal sector is vital for sustainable poverty reduction (Hendro et al., 2021).

H2: Informal Employment Availability has significant effect on Poverty Rates.

**The Effect of Income Levels on Poverty Rates**

Income level is a crucial indicator of household and individual welfare, as it determines the ability to meet basic needs such as food, housing, healthcare, and education. According to Mansur et al. (2023), income refers to the total financial earnings received from labor or economic activities within a specific period. Low income is one of the primary, direct causes of poverty due to its limitation on access to essential resources. In the Indonesian context, several structural factors affect income levels, including regulatory frameworks, access to financial services, corruption, and empowerment initiatives. Roestamy (2018) emphasizes that improving housing policies and legal protections contributes to income stability, particularly for low-income families. In addition, Rahmida and Ridwan (2023) found that community empowerment programs such as vocational training and small business support can raise income levels and overall household welfare. However, Nur (2022) argues that regional income disparities, coupled with varied provincial poverty lines, complicate the identification of poverty. People in one region may be classified as poor despite having higher incomes than those in other areas. Furthermore, Iskandar (2018) highlights corruption as a significant barrier, as it reduces the resources available for public services and deepens social inequality. Therefore, income is essential but must be addressed alongside structural reforms.

H3: Income levels have significant effect on Poverty Rates.

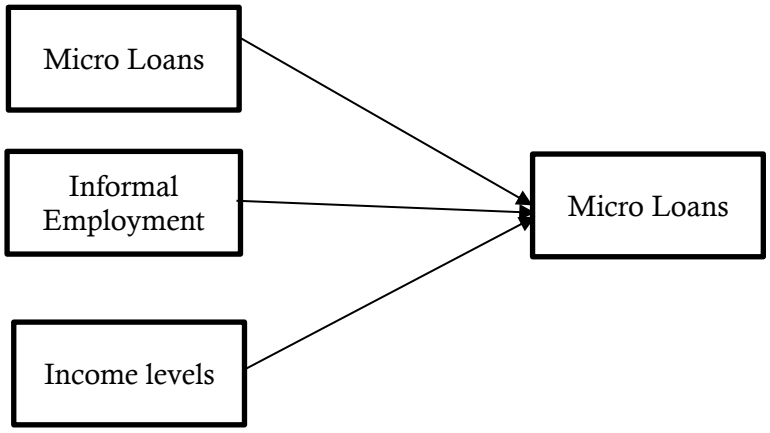


**Figure 1.** Framework

Figure 1 presents a research framework that aims to test the influence of three independent variables on poverty level as a dependent variable. The independent variables hypothesized to affect the poverty rate are microcredit, availability of informal sector jobs, and income level. This framework visually depicts the cause-and-effect relationship through arrows that link each independent variable to poverty levels. This study seeks to significantly prove how microcredit, informal sector job availability, and income levels contribute to changes in poverty rates, as stated in the three hypotheses proposed. Thus, this framework is the basis for analyzing the impact of these three factors on poverty conditions.

## RESEARCH METHOD

This study employed a panel data approach, which integrates both cross-sectional and time series data, allowing for more comprehensive and dynamic analysis. Cross-sectional data refer to observations collected from multiple subjects at the same point in time, while time series data involve repeated observations of the same subject over multiple time periods. The cross-sectional component in this research encompasses 13 provinces within the Eastern Indonesia Region, specifically Bali, West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, West

Sulawesi, Gorontalo, Maluku, North Maluku, Papua, and West Papua. The study relied on secondary data, which were not collected directly by the researchers but obtained from credible sources. These include the Financial Services Authority and publications from the Central Statistics Agency spanning the years 2020 to 2022. The variables utilized in the study are the poverty rate, income level, availability of informal employment, and number of microloans in each province.

To estimate the effect of income, informal employment availability, and microloans on poverty levels across these provinces, the study applied panel data regression analysis. The econometric model formulated is:

$$KMS_{it} = \beta 0 + \beta 1PM_{it} + \beta 2LKI_{it} + \beta 3TP_{it} + e_{it}$$

where KMSit represents the poverty rate, $PM_{it}$ denotes microloans, $LKI_{it}$ refers to informal employment availability, and $TP_{it}$ indicates income levels. The subscripts i and t refer to cross-sectional units and time series respectively, while eit captures the error term. To identify the most appropriate estimation method, the study compared three different panel data models: the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Statistical tests such as the Chow test, Hausman test, and Lagrange Multiplier (LM) test were conducted to determine the best-fitting model for the data. Ultimately, these methods ensured that the chosen model provided accurate and reliable estimates of the influence of the independent variables on poverty levels in Eastern Indonesia.

**RESULTS**

The Eastern Indonesia region consistently has the highest poverty rates in the country, with Papua leading at an average of 26.99% from 2020 to 2022 and peaking at 27.38% in 2021. West Papua and East Nusa Tenggara follow with rates of 21.65% and 20.63%, respectively, highlighting ongoing social and economic challenges. In contrast, Bali records the lowest poverty rate at 4.57%, showing relative success in poverty reduction. Provinces like North Sulawesi, South Sulawesi, and North Maluku have rates below 10%, while Gorontalo, Maluku, and West Sulawesi range between 11% and 17%. Despite a slight increase in 2020 due to the COVID-19 pandemic, the overall poverty rate in the region declined from 14.00% in 2020 to 13.57% in 2022, reflecting government recovery efforts. Microloans, vital for those lacking formal banking access, increased regionally from 12,827.02 billion rupiah in 2020 to 16,523.89 billion in 2022. South Sulawesi had the highest microloan value, emphasizing microfinance's role in supporting economic empowerment in underbanked Eastern Indonesia.

The availability of informal employment is also an important factor in efforts to reduce poverty. In Eastern Indonesia, many people rely on the informal sector for a living. Figure 2 depicts data on informal employment availability in the Eastern Indonesia Region from 2020 to 2022.

According to Table 1, the province with the most availability of informal employment from 2020-2022 is Papua, with an average of 84.11%, while Bali has the lowest availability of informal employment, at 53.43%. The average availability of informal jobs in the Eastern Indonesia Region has increased every year in the period 2020-2022. This indicates the region's population is heavily dependent on the informal sector as their primary source of income. This rise may be the result of residents turning to the informal sector to fulfill their financial demands because there aren't enough official jobs accessible. Furthermore, because it doesn't require any training or credentials, the informal sector is more accessible to the general public and frequently offers more flexibility.

Community income is a crucial metric that represents the financial health of households or individuals. Low income is often the main cause of poverty, as it limits an individual's ability to meet their basic needs. Revenue in the Eastern Indonesia Region in 2020-2022 can be shown in Table 1.

**Table 1.** Availability of Informal Employment in Eastern Indonesia in 2020-2022 (Percent)

| Province | 2020 | 2021 | 2022 | Provincial Average |
|---|---|---|---|---|
| Bali | 56.69 | 57.10 | 53.43 | 55.74 |
| Nusa Tenggara Barat | 73.47 | 73.80 | 75.36 | 74.24 |
| Nusa Tenggara Timur | 76.10 | 75.97 | 75.24 | 75.77 |
| Sulawesi Utara | 60.46 | 60.70 | 59.15 | 60.10 |
| Sulawesi Tengah | 67.37 | 67.32 | 67.87 | 67.52 |
| Sulawesi Selatan | 64.22 | 63.24 | 63.55 | 63.67 |
| Sulawesi Tenggara | 64.59 | 62.81 | 62.30 | 63.23 |
| Sulawesi Barat | 72.63 | 72.80 | 77.25 | 74.23 |
| Gorontalo | 62.12 | 62.30 | 64.97 | 63.13 |
| Maluku | 66.56 | 66.50 | 63.30 | 65.45 |
| Maluku Utara | 66.13 | 65.54 | 65.63 | 65.77 |
| Papua | 79.92 | 80.47 | 84.11 | 81.50 |
| Papua Barat | 57.98 | 57.92 | 60.28 | 58.73 |
| Average/Year | 66.79 | 66.35 | 67.12 | |

**Table 2.** Availability of Informal Employment in Eastern Indonesia in 2020-2022 (Percent)

| Province | 2020 | 2021 | 2022 | Provincial Average |
|---|---|---|---|---|
| Bali | 1,987,045,360,507 | 1,852,418,171 | 2,449,459,087,878 | 2,108,140.80 |
| Nusa Tenggara Barat | 1,095,418,692,934 | 1,607,237,946,415 | 1,748,581,347,757 | 1,683,746.00 |
| Nusa Tenggara Timur | 1,579,732,508,583 | 1,482,960,411,228 | 1,568,229,741,135 | 1,543,642.89 |
| Sulawesi Utara | 2,479,604,830,048 | 2,430,810,274,088 | 2,687,389,874,895 | 2,532,621.66 |
| Sulawesi Tengah | 1,952,193,741,018 | 1,941,649,412,267 | 2,107,684,538,838 | 2,000,509.23 |
| Sulawesi Selatan | 2,235,105,051,143 | 2,138,167,505,551 | 2,419,288,794,242 | 2,264,187.12 |
| Sulawesi Tenggara | 2,038,641,188,682 | 1,938,678,589,605 | 2,322,710,769,813 | 2,100,009.27 |
| Sulawesi Barat | 1,637,967,654,445 | 1,683,468,627,014 | 1,789,575,440,110 | 1,703,670.54 |
| Gorontalo | 1,808,874,416,052 | 1,712,704,427,055 | 1,907,961,323,081 | 1,886,885.39 |
| Maluku | 2,120,697,674,885 | 1,970,431,667,447 | 2,075,256,323,088 | 2,055,461.86 |
| Maluku Utara | 2,252,299,099,563 | 2,281,137,115,050 | 2,372,156,533,000 | 2,302,094.52 |
| Papua | 3,080,048,818,836 | 3,090,087,532,887 | 3,087,836,700,000 | 3,085,991.02 |
| Papua Barat | 2,842,314,779,715 | 2,667,544,312,084 | 2,994,002,652,630 | 2,834,640.58 |
| Average/Year | 2,131,584.22 | 2,066,600.17 | 2,265,971.21 | |

Based on Table 2, the province with the highest income from 2020-2022 is Papua with an average income of 3,099,087.53 rupiah, while the province with the lowest income from 2020-2022 is East Nusa Tenggara at 1,482,966.41. The average income in the Eastern Indonesia Region fluctuates but tends to increase at the end of 2022 even though in 2021 there was a decrease in the income level in the Eastern Indonesia Region. This suggests that the region is experiencing economic instability, which could be brought on by several things, including the state of the world economy, uneven local regulations, or the high frequency of natural disasters. These income fluctuations show that despite efforts to improve people's welfare, the impact is not even and is still vulnerable to external changes.

**Table 3.** Cross Section Panel Data Regression Results

| Variable | Regression Coefficients | | |
|---|---|---|---|
| | PLS | FEM | BRAKE |
| C | -26.32005 | 8.653941 | 6.697282 |
| PM | -0.000113 | -6.04E-05 | -7.164074 |
| LKI | 0.473843 | 0.075144 | 0.100419 |
| TP | 4.69E-06 | 4.52E-07 | 6.539433 |
| R-squared | 0.509414 | 0.997832 | 0.207340 |
| Adjusted R-squared | 0.467364 | 0.996419 | 0.139398 |
| F-statistic | 12.11442 | 705.8680 | 3.051709 |
| Prob(F-statistic) | 0.000014 | 0.000000 | 0.041207 |

Table 3 presents the results of a panel data regression analysis using three different model approaches: Pooled Least Square (PLS), Fixed Effect Model (FEM), and Random Effect Model (REM), referred to as "BRAKE" in the table. Each model estimates

regression coefficients for the independent variables PM (Micro Loans), LKI (Availability of Informal Employment), and TP (Income Levels) alongside a constant term (C). The PLS model reports a negative constant (-26.32005) and a very small negative coefficient for PM (-0.000113), while LKI and TP have positive effects. With an R-squared value of 0.509414, about 51% of the variation in poverty rates is explained by this model, and the F-statistic p-value of 0.000014 indicates statistical significance.

The FEM model produces extremely high explanatory power with an R-squared of 0.997832 and an adjusted R-squared of 0.996419, supported by a highly significant F-statistic p-value of 0.000000. In contrast, the REM model, selected as the best fit based on Chow, Hausman, and Lagrange Multiplier tests, provides more moderate and realistic coefficient values. In this model, the constant is 6.697282, PM has a strong negative effect (-7.164074), LKI a modest positive effect (0.100419), and TP also has a positive effect (6.539433). Its R-squared value is 0.207340, and the adjusted R-squared is 0.139398, suggesting it explains about 20% of the variation in poverty levels, with a statistically significant F-statistic p-value of 0.041207. The Chow test rejects PLS due to a very low p-value (0.0000), favoring FEM, but the Hausman test result (p = 0.1268) supports REM, confirming it as the most suitable model for this study.

**Table 4.** Random Effect Method Estimation Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 6.697282 | 3.872888 | 1.729274 | 0.0926 |
| PM | - 7.164074 | 3.05E-05 | -2.349301 | 0.0246 |
| LKI | 0.100419 | 0.049063 | 2.046744 | 0.0483 |
| TP | 6.539433 | 5.70E-07 | 1.148272 | 0.2586 |
| Weighted Statistics | | | | |
| Root MSE | 0.373236 | R-squared | | 0.207340 |
| Mean dependent var | 0.579233 | Adjusted R-squared | | 0.139398 |
| S.D. dependent var | 0.424699 | S.E. of regression | | 0.393987 |
| Sum squared resid | 5.432914 | F-statistic | | 3.051709 |
| Durbin-Watson stat | 1.606801 | Prob(F-statistic) | | 0.041207 |

Based on Table 4 the results of panel data processing using the REM technique, the following regression equation was obtained:

$$KMS_{it} = 6.697282 + (-7.164074)\ PM_{it} + 0.100419\ LKI_{it} + 6.539433\ TP_{it}$$

The constant value of 6.697282 means that without the presence of the independent variables PM (X1), LKI (X2), and TP (X3), the dependent variable KMS (Y) will have a value of 6.697282. The beta coefficient for the PM variable (X1) is -7.164074, indicating a negative relationship. This means that if the PM variable increases by 1 unit, the KMS variable will decrease by 7.164074. Conversely, if the PM variable decreases by 1 unit, the KMS variable will increase by 7.164074. Furthermore, the beta coefficient of the LKI variable (X2) is 0.100419, indicating a positive direction. This implies that an increase of 1 unit in LKI will increase the KMS variable by 0.100419, and a decrease of 1 unit in LKI will reduce the KMS variable by the same amount. Similarly, the TP variable (X3) has a positive beta coefficient of 6.539433, which means that an increase of 1 unit in TP will increase KMS by 6.539433. On the other hand, a 1-unit decrease in TP will result in a decrease of 6.539433 in the KMS variable.

The predicted predictive capacity of the computed model is indicated by the coefficient of determination ($R^2$). The variables of income level, availability of informal job, and microloan can account for 20.73% of the variation in the poverty level variable, with an $R^2$ value of 0.207340. In the remaining 79.27%, variables or other factors not included in the model had an impact. The F Test was designed to determine the combined impact of independent variables (income level, availability of informal employment, and microloans) on dependent variables (poverty level) at a significant threshold of 0.05. The

F value calculated in the table above is 3.051709 and the F value of the table is 2.64147, which means that the F calculation is greater than the F of the table (19.98350 > 2.87). Meanwhile, the significant value of 0.041207 is smaller than 0.05. So H0 is rejected, and Ha is accepted, meaning that simultaneously the variables of microloans, the availability of informal employment, and the level of income affect the Poverty Level in the Eastern Indonesia Region.

**Table 5.** T Test Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 6.697282 | 3.872888 | 1.729274 | 0.0926 |
| PM | - 7.164074 | 3.05E-05 | -2.349301 | 0.0246 |
| LKI | 0.100419 | 0.049063 | 2.046744 | 0.0483 |
| TP | 6.539433 | 5.70E-07 | 1.148272 | 0.2586 |

Based on Table 5, the partial effect of each independent variable on the poverty rate was tested using a critical t-value of 1.68957, showing different results for each variable. The Microloan (PM) variable had a t-value of -2.349301 with a significance level of 0.0246, below the 0.05 threshold, indicating a significant negative effect on poverty levels in Eastern Indonesia. Thus, the null hypothesis is rejected, and the alternative hypothesis is accepted. The availability of Informal Employment (LKI) also showed a significant effect with a t-value of 2.046744 and a significance of 0.0483, greater than the critical t-value, indicating that informal jobs positively influence poverty levels. In contrast, the Income Level (TP) variable had a t-value of 1.148272 and a significance of 0.2586, exceeding the 0.05 threshold, meaning its effect on poverty is not statistically significant. Therefore, only PM and LKI significantly contribute to changes in poverty rates in the region.

## DISCUSSION

These findings highlight microloans as an effective tool for poverty alleviation. Studies from Bangladesh, Nigeria, Pakistan, and other countries support this conclusion, showing that microfinance institutions offering microloans improve living standards by providing credit access to small and medium enterprises, leading to higher incomes, savings, and investments (Adeniran & Ogwumike, 2019; Anwaar et al., 2022; Obadire, 2022). Research also shows that microloans positively affect total income, expenditures, and investments, thereby reducing poverty (Safii & Suwarno, 2018). Moreover, microloan availability is linked to business growth, asset acquisition, and overall economic development, underscoring microfinance's vital role in poverty reduction (Suaidah & Arjun, 2023; Ramadhanti, 2024.). In Papua, Indonesia's poorest province, microloans are particularly impactful because many residents depend on informal sectors or subsistence farming. Microloans help individuals, such as housewives selling traditional handicrafts, to start small businesses, improve family incomes, and afford education and basic needs. Since many communities in Eastern Indonesia lack access to formal financial services, government- and NGO-supported microloan programs foster entrepreneurship and economic independence, contributing to poverty alleviation at both individual and regional levels.

Similarly, the availability of informal employment significantly affects poverty rates in Eastern Indonesia. The t-test reveals a strong relationship between informal job availability and poverty levels, emphasizing informal work as a critical income source for those excluded from formal employment. Although informal jobs may lack stability and social security, they provide vulnerable populations with opportunities to earn income and reduce poverty. Studies from the Mentawai Islands and Pakistan confirm that most poor individuals depend on informal sector jobs, although these often do not provide enough income to escape poverty fully (Putri et al., 2023). Households led by informal workers tend to spend more on essentials like food and health but reduce education expenditures, which can increase food insecurity (Sultana, 2023). Informal employment serves as subsistence for marginalized groups in economies with limited formal sectors,

contributing to poverty alleviation on a per-job basis despite limited national impact (Sharma & Adhikari, 2020). In Papua, limited infrastructure and economic opportunities restrict formal employment, pushing many to rely on informal jobs such as petty trading and subsistence farming. While increasing informal employment can help reduce poverty by expanding job availability, poor working conditions in this sector call for policies that protect workers and promote stable formal jobs.

In contrast, income levels do not have a statistically significant effect on poverty rates in Eastern Indonesia. This aligns with research showing that income variations alone do not directly reduce poverty. For example, a study in Enrekang Regency found that investment negatively impacted poverty reduction, while economic growth and income distribution had no clear effects (Suwandi & Sabar, 2022). Similarly, in Nigeria, poverty correlates more strongly with income inequality than with income increases, suggesting that raising earnings alone is insufficient to eradicate poverty (Musa et al., 2024). The complex relationship between income and poverty underscores the need for multifaceted approaches addressing more than just income to tackle poverty effectively. Unequal income distribution may keep many in poverty despite some having higher earnings. Additionally, high income does not guarantee improved well-being if living costs are high or income is unstable. In Papua, income distribution is uneven; a small segment benefits from high incomes in sectors like mining, while many remain poor. Fluctuating incomes, especially for informal and seasonal workers, combined with limited access to infrastructure, healthcare, and education, deepens poverty.

## CONCLUSION

The study found that microloans have a significant impact on poverty rates in the Eastern Indonesia Region. Microloans play a crucial role in poverty reduction by providing capital access to poor individuals and families, enabling them to start or expand small businesses, which helps increase their income and reduce poverty. Additionally, the availability of informal employment also influences poverty levels, indicating that informal work is an important source of income for many people living in poverty, especially those without access to formal jobs. However, the study revealed that income levels alone do not significantly affect poverty rates. This suggests that while income is important for well-being, differences in income alone cannot fully explain changes in poverty. High income does not automatically reduce poverty unless it is coupled with fair distribution and better access to basic services. When considered together, microloans, informal employment availability, and income levels significantly influence poverty rates in Eastern Indonesia.

Based on these findings, the study recommends improving the quality of informal employment and expanding microloan programs. Microloan initiatives should increase accessibility, simplify application processes, and provide entrepreneurial training to ensure borrowers can manage funds effectively. Moreover, efforts to enhance informal workers' job security and quality through business mentoring, skills development, and improved working conditions can help create more stable and higher-paying employment opportunities in the informal sector. Future research is encouraged to conduct longitudinal studies on informal employment availability, the long-term impacts of microloans, and other poverty-related factors in Eastern Indonesia. Including additional variables such as health, education, and social service access will help produce more comprehensive insights, guiding more effective poverty reduction strategies.

## REFERENCES

[1] Adeniran, A. S., & Ogwumike, F. O. (2019). Microcredit and poverty reduction (a focus on ibadan north local government area, Oyo State, Nigeria). *Journal of Agriculture, Forestry and the Social Sciences, 14*(2), 51–66.

[2] Agustiya, K., Wulandary, D., Nufus, N. F. B., & Hasanah, H. (2024). Kontribusi dinas sosial dalam upaya pengentasan kemiskinan di Kabupaten Jember. *Jurnal Pengabdian Mandiri, 3*(2), 193–200.

[3] Anwaar, S., Ali, A., & Saleem, S. (2022). Role of micro financing institutions for the improvement of standard of living. *Pakistan Journal of Social Research, 04*(03), 299–310.

[4] Aristanto, E., Khouroh, U., & Ratnaningsih, C. S. (2020). Dinamika kebijakan program Kredit Usaha Rakyat (KUR) di Indonesia. *Jurnal Manajemen Dan Kewirausahaan, 8*(1), 85–95.

[5] Axellina, M. S. (2020). Informality and the education factor in Indonesian labor. *Journal of Indonesian Applied Economics, 8*(2), 71–80.

[6] Bella, A., & Dartanto, T. (2018). Persons with Disabilities (PWD) and poverty in Indonesia. *Malaysian Journal of Economic Studies, 55*(2), 167–188.

[7] Dartanto, T., Moeis, F. R., & Otsubo, S. (2020). Intragenerational economic mobility in Indonesia: a transition from poverty to the middle class in 1993–2014. *Bulletin of Indonesian Economic Studies, 56*(2), 193–224.

[8] Feder, J., & Yu, D. (2020). Employed yet poor: low-wage employment and working poverty in South Africa. *Development Southern Africa, 37*(3), 363–381.

[9] Hasnakamilah, A., & Purnomo, Y. (2023). The influence of motivation and discipline on employee performance in the public sector in Bandung. *Jurnal Ilmiah Manajemen Kesatuan, 11*(3), 647–656.

[10] Hendro, A. D., Khiat, D., Wibisono, R. S., Nike, R., & Mahendradani, R. (2021). Identifikasi kriteria pekerja informal terhadap pemilik usaha makan minum di Jakarta. *Indonesian Business Review, 4*(2), 114–133.

[11] Iskandar, A. (2018). Does less corruption reduce income inequality in Indonesia?. *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara, 4*(2), 167–186.

[12] Jayawarsa, A. A. K., Deswari, P. N. N., & Wulandari, I. G. A. (2023). Influence economic growth and percentage of the unemployed population to poverty in Indonesia 2016-2020. International *Journal of Environmental, Sustainability, and Social Science, 4*(6), 1678–1683.

[13] Mahadevan, R., Nugroho, A., & Amir, H. (2017). Do inward looking trade policies affect poverty and income inequality? Evidence from Indonesia's recent wave of rising protectionism. *Economic Modelling, 62*(3), 23–34.

[14] Mai, T., & Mahadevan, R. (2016). A research note on the poverty dynamics and cost of poverty inequality: Case study of Indonesia. *Economic Analysis and Policy, 49*(3), 100–107.

[15] Mansur, M., Syahrain, R., & Kalengkongan, Y. (2023). Inhibiting and supporting factors for the production and income dynamics of candied cashew entrepreneurs in Pulau Makian. *Jurnal Ilmiah Manajemen Kesatuan, 11*(3), 729–738.

[16] Metcalf, G. E. (2019). On the economics of a carbon tax for the United States. *Brookings Papers on Economic Activity, 50*(1), 405–484.

[17] Moeis, F. R., Dartanto, T., Moeis, J. P., & Ikhsan, M. (2020). A Longitudinal study of agriculture households in Indonesia: The effect of land and labor mobility on welfare and poverty dynamics. *World Development Perspectives, 20*(3), 251-261.

[18] Musa, I., Enaberue, E., & Magaji, S. (2024). Impact of income inequality on poverty level in Nigeria: Evidence from ARDL Model. *Asian Journal of Economics, Business and Accounting, 24*(5), 86–98.

[19] Nur, Y. (2022). The impact of people's business credit program, minimum wage, and investment on Indonesian poverty. *FWU Journal of Social Sciences, 16*(2), 125–141.

[20] Obadire, A. M. (2022). Analysis of the impact of microfinancing on poverty alleviation in Nigeria. *Journal of Financial Risk Management, 11*(03), 648–657.

[21] Prasojo, A. P. S. (2022). Pandemi Covid-19 dan turnover ke pekerjaan informal. *Jurnal Aplikasi Statistika & Komputasi Statistik, 14*(2), 49–62.

[22] Purwaningsih, S. S., Romdiati, H., & Latifa, A. (2022). Urban informal sector workers during the Covid- 19 pandemic in Indonesia: Social Networking as a Strategy for Business Sustainability. *International Journal of Interreligious and Intercultural Studies, 5*(1), 37–52.

[23] Purwono, R., Wardana, W. W., Haryanto, T., & Khoerul Mubin, M. (2021). Poverty dynamics in Indonesia: empirical evidence from three main approaches. *World Development Perspectives, 23*(3), 336-346.

[24] Putri, R. F., Sarajwati, M. K. A., Aini, F. A. N., Setiacahyandari, H. K., Dairina, I., & Dewi, A. K. (2023). Formal-informal employment and poverty dynamics: a case study of Mentawai Islands Regency, 2019-2021. *IOP Conference Series: Earth and Environmental Science, 1233*(1), 012034.

[25] Rahmida, S., & Ridwan, M. (2023). Analisis pengelolaan Ziswaf untuk meningkatkan kesejahteran masyarakat dibidang ekonomi. *Transformasi: Journal of Economics and Business Management, 2*(4), 157–165.

[26] Ramadhanti, S. (2024). The influence of awareness, knowledge and sanctions on compliance retribution users flats with technology information as variables moderation. *Jurnal Ilmiah Manajemen Kesatuan, 12*(5), 1549–1564.

[27] Roestamy, M. (2018). Providing affordable housing for low-income people in Indonesia (development of model on housing law). *IJASOS- International E-Journal of Advances in Social Sciences, 3*(9), 1094–1103.

[28] Safii, A. A., & Suwarno, T. (2018). Faktor-faktor yang mempengaruhi perolehan kredit oleh pengusaha mikro. *Jurnal Ilmiah Ekonomi Bisnis, 4*(3), 330–341.

[29] Setyari, N. P. W. (2012). Evaluasi dampak kredit mikro terhadap kesejahteraan rumah tangga di Indonesia: Analisa data panel. *Jurnal Ekonomi Kuantitatif Terapan, 5*(2), 79–150.

[30] Sharma, B. P., & Adhikari, D. B. (2020). Informal economy and poverty dynamics: a review. Quest *Journal of Management and Social Sciences, 2*(1), 130–140.

[31] Suaidah, S., & Arjun, D. (2023). Urgensi dan peran lembaga keuangan mikro dalam pengentasan kemiskinan dan pengembangan ekonomi umat. *Reinforce: Journal of Sharia Management, 2*(1), 75–83.

[32] Sugiharti, L., Esquivias, M. A., Shaari, M. S., Jayanti, A. D., & Ridzuan, A. R. (2023a). Indonesia's poverty puzzle: Chronic vs. transient poverty dynamics. *Cogent Economics & Finance, 11*(2), 2267927.

[33] Sugiharti, L., Purwono, R., Esquivias, M. A., & Rohmawati, H. (2023b). The nexus between crime rates, poverty, and income inequality: A case study of Indonesia. *Economies, 11*(2), 62-72.

[34] Sultana, S. (2023). Informality, food insecurity and intra-household resource allocation: evidence from Pakistan. *IRASD Journal of Economics, 5*(4), 1059–1074.

[35] Suratini, S. (2018). Micro-Loans and household economies: evidence in Indonesia. *Signifikan: Jurnal Ilmu Ekonomi, 7*(1), 91–102.

[36] Susilowati, E., & Leonnard, L. (2019). Factors influence financial inclusion: evidence from Indonesian micro data. *Etikonomi, 18*(1), 121–132.

[37] Suwandi, & Sabar, W. (2022). Do economic growth, income distribution, and investment reduce poverty level? *Bulletin of Economic Studies (BEST), 2*(2), 87–96.

[38] Taufiq, N., & Dartanto, T. (2020). Education, informal turnover and poverty dynamics in Indonesia. *International Journal of Economics & Management, 14*(1), 157–172.

[39] van Leeuwen, B., & Földvári, P. (2016). The development of inequality and poverty in Indonesia, 1932–2008. *Bulletin of Indonesian Economic Studies, 52*(3), 379–402.

[40] Yusriadi, Y., Kurniawaty, Sibali, A., & Mattalatta. (2023). Poverty policy: between hope and reality. *Journal of Indonesian Scholars for Social Research, 3(2), 107–114.*

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