
The Role of Regional Expenditure in Mitigating Poverty: A Regional Economic Perspective of East Java

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Abstract:

Poverty is a multidimensional issue that reflects the inability of individuals or groups to meet basic needs such as food, education, and healthcare. In East Java, the Covid-19 pandemic exacerbated poverty conditions, significantly increasing unemployment rates and widening disparities between urban and rural areas. This study aims to analyze the impact of Regional Original Revenue (ROR), regional expenditures, labor force participation, and population size on poverty levels in East Java from 2018 to 2022. Using a quantitative method with a panel data approach, the study covers 38 districts/cities. Secondary data were obtained from the Central Statistics Agency (CSA) and analyzed using the Fixed Effect Model. The findings reveal that Regional Original Revenue (ROR) does not have a significant effect on poverty levels in East Java. Conversely, regional expenditures and the labor force significantly impact poverty; regional expenditures effectively reduce poverty levels, while the labor force, when not accompanied by job creation, contributes to an increase in poverty. Meanwhile, population size does not show a significant effect on poverty. However, simultaneously, ROR, regional expenditures, labor force, and population size significantly influence poverty levels. Therefore, poverty alleviation in East Java requires integrated policies that include optimizing ROR allocation, improving the efficiency of regional expenditures, creating adequate job opportunities, and managing population growth through education and training. These measures are expected to deliver sustainable long-term impacts.

Keywords: *population size, poverty, regional expenditure, regional original revenue.*

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1. Introduction

Poverty is one of the fundamental challenges faced by various countries, including Indonesia (Azzahra et al., 2024; Sparrow et al., 2020). This issue not only reflects economic limitations but also involves the inability of individuals or groups to fulfill basic needs such as food, clothing, shelter, education, and healthcare (Ariyanto, 2023; Sparrow et al., 2020). In Indonesia, poverty significantly impacts quality of life, social stability, and economic growth (Anser et al., 2020). The government has prioritized poverty alleviation through programs such as the Family Hope Program (FHP) and Direct Cash Assistance (DCA) (Sulaiman et al., 2021). However, multidimensional challenges remain, particularly in provinces like East Java, which contribute significantly to the national economy. With its large population and growing economy, East Java faces the complexity of poverty involving disparities between

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urban and rural areas, unemployment rates, and limited access to basic services (Sihombing, 2019; Sparrow et al., 2020). Therefore, an in-depth understanding of the characteristics of poverty is key to designing sustainable policies.

In March 2022, the number of people living in poverty in Indonesia was recorded at 26.36 million, with a poverty rate of 9.54 percent. Data from the Central Statistics Agency (CSA) showed a decrease in the poverty rate of 0.17 percentage points compared to September 2021 and 0.60 percentage points compared to March 2021. However, in September 2022, the poverty rate slightly increased to 9.57 percent, rising by 0.03 percentage points compared to March 2022. Nevertheless, the trend of poverty reduction was still evident when compared to the same period in the previous year (Triono & Sangaji, 2023). According to the latest data from CSA, in March 2023, the number of people living in poverty decreased further to 25.90 million, lower than the 26.36 million recorded in March 2022. The poverty rate also declined to 9.36 percent, although this figure remains relatively high (Purwanti, 2024). The COVID-19 pandemic, however, exacerbated poverty conditions in Indonesia, including in East Java, significantly impacting the economy and increasing the number of households living below the poverty line.

During the early phase of the pandemic, East Java experienced a sharp rise in the poverty rate due to widespread economic repercussions. Meanwhile, government programs such as the Village Fund Direct Cash Assistance (VFDCA) and the Family Hope Program (FHP) played a crucial role in reducing poverty levels, although challenges remain in ensuring accurate targeting and sustainable impact. Data from the Central Statistics Agency (CSA) shows that the national poverty rate increased from 9.41% in 2019 to 10.14% in 2021, before declining to 9.54% in 2022 (BPS, 2022). In East Java, the poverty rate recorded an increase of 1.53% in March 2020 and 1.26% in September 2020 (BPS NTB, 2022). Although programs such as the Village Fund Direct Cash Assistance (VFDCA) and the Family Hope Program (FHP) have shown positive results in reducing poverty levels, significant challenges remain in ensuring accurate targeting and long-term impacts. Additionally, the decline in Regional Original Revenue (ROR) by 7.12% in 2020 reflects the widespread effects of the pandemic, which not only impacted households but also the fiscal capacity of local governments (BPKAD, 2022).

This study adopts a multidimensional approach based on Amartya Sen's capability theory, which emphasizes that poverty is not solely related to economic deprivation but also includes limitations in leading a desired life (Kimhur, 2020; Winter & Kim, 2021). This approach is relevant for understanding the inequality dimensions between urban and rural areas in East Java. Additionally, sustainability theory highlights the importance of efficient resource allocation to ensure the long-term impact of ROR-based programs. In this context, structural poverty theory points out that generational poverty in East Java is caused by social and economic structures that limit access to opportunities (Kaufmann et al., 2021). Therefore, community empowerment-based interventions are essential to breaking the cycle of poverty.

This research shares similarities with Ernawati et al. (2021) in using panel data methods to analyze the effects of government policies on societal welfare but focuses

on the impact of ROR, regional expenditure, labor force, and population size on poverty. Similar to Nurias et al. (2023), this study examines the relationship between government spending and poverty rates but specifically addresses East Java. The study also aligns with Kartika et al. (2021) in analyzing government expenditure in the context of poverty reduction, although the analytical methods differ. Furthermore, the research is similar to Kholifah & Sumarsono (2023) as both focus on East Java, use panel data, and highlight economic variables such as fund allocation and economic growth affecting poverty.

The differences lie in this study's exclusion of direct village fund allocation analysis as covered in Ernawati et al. (2021), emphasizing ROR and regional expenditure instead. Compared to Nurias et al. (2023), this study is limited to 38 regencies/cities in East Java, whereas Nurias et al. (2023) includes national-level provinces. Unlike Kartika et al. (2021), which includes the Human Development Index (HDI) as an intervening variable, this research does not incorporate HDI. Moreover, this study covers a longer period (2018–2022) and integrates time-series and cross-sectional data, whereas Kholifah & Sumarsono (2023) focuses on panel data from 2019–2022 with a narrower variable scope.

This research aims to analyze the effects of ROR, regional expenditure, labor force, and population size on poverty in East Java. The novelty lies in integrating the analysis of these variables within the regional context of East Java, focusing on the dynamics of poverty levels, the effectiveness of ROR-based programs, and community empowerment approaches to address generational poverty. The research questions include: (1) What factors influence the effectiveness of poverty alleviation programs (2) What is the effect of Regional Original Revenue (ROR), regional expenditures, the labor force, and the population size on the percentage of the poor population in Regencies/Cities in East Java Province?. The findings of this study are expected to provide strategic recommendations for local governments in designing more effective policies for sustainable poverty reduction.

2. Theoretical Background

Regional expenditure is one of the key instruments in poverty alleviation as it serves as a mechanism for redistributing resources to improve public welfare. According to Iskandar (2019), government spending, including regional expenditure, plays a significant role in income distribution through social programs such as direct cash assistance and subsidies. These programs have a direct impact on reducing poverty levels, particularly for vulnerable groups (Ogujiuba & Mngometulu, 2022). Furthermore, productive capital expenditure, such as infrastructure development and public service provision, creates long-term economic opportunities that can enhance community economic activities (Chu et al., 2020; Javid, 2019).

The relationship between regional expenditure and poverty can be further analyzed by considering other macroeconomic variables such as Regional Original Revenue (ROR), the labor force participation rate (LFPR), and population size. Regional

Original Revenue, as stipulated in Law No. 33 of 2004 (Pemerintah Pusat, 2004), is one of the main sources of funding for regional expenditures. An increase in ROR enables local governments to allocate larger budgets to strategic sectors such as health, education, and infrastructure, which play a role in improving people's quality of life and reducing poverty (Isyandi & Trihatmoko, 2022). Thus, there is a direct relationship between ROR, regional expenditure, and public welfare.

The labor force participation rate is also a key component in poverty alleviation efforts. LFPR reflects the proportion of the working-age population actively engaged in the economy, which, when supported by adequate job creation policies, can reduce unemployment and increase household income (Monseny et al., 2020; Mubarak & Nugroho, 2020; Pasaribu et al., 2022). However, without proper management, labor force growth may exacerbate poverty if not accompanied by increased job opportunities. Additionally, population size significantly influences poverty levels. Rapid population growth, without balanced economic growth, can increase pressure on available resources and infrastructure, ultimately worsening economic inequality (Awemu et al., 2019; Giller et al., 2021). This inequality is more pronounced in developing countries like Indonesia, where resource distribution is often uneven (Hutabarat et al., 2023).

In the context of the Redistribution with Growth theory, as explained by Choi (2019) and Okunogbe & Santoro (2023), inclusive economic growth must be accompanied by income redistribution through effective fiscal policies, such as social spending and infrastructure investment. This theory is relevant in explaining how the combination of regional expenditure, ROR, LFPR, and population management can influence comprehensive poverty reduction efforts. Moreover, the Multidimensional Poverty Index (Alkire et al., 2023), provides broader insights into various aspects of poverty, including education, health, and living standards, which serve as indicators of the success of poverty alleviation policies.

Based on the theoretical review presented above, the research hypotheses developed to test the relationship between independent variables, such as Regional Original Revenue (ROR), regional expenditure, labor force participation rate, and population size, and poverty levels in regencies/municipalities in East Java Province, are as follows:

- H1: Regional Original Revenue (ROR) does not have a significant effect on poverty levels in East Java Province.
- H2: Regional expenditure has a significant effect on poverty levels in East Java Province.
- H3: Labor force participation rate has a significant effect on poverty levels in East Java Province.
- H4: Population size does not have a significant effect on poverty levels in East Java Province.
- H5: The variables ROR, regional expenditure, labor force participation rate, and population size collectively have a significant effect on poverty levels in East Java Province.

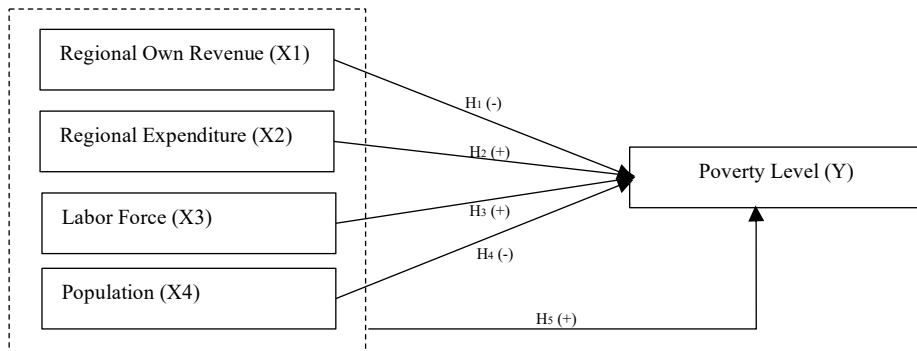


Figure 1. Hypothesis Model

3. Methodology

This study employed a quantitative approach to investigate the effects of several variables, namely Regional Original Revenue (ROR), regional expenditures, the labor force, and the population size, on poverty levels during the 2018–2022 period. The analysis utilized econometric methods with a panel data regression approach, combining time series and cross-sectional data. The study used quantitative data in the form of secondary panel data, including ROR, regional expenditures, the labor force, and the population size. This data was sourced from reliable institutions, namely the Central Statistics Agency (CSA) of East Java Province and the website of the Regional Financial and Asset Management Agency (RFAMA) of East Java Province. Secondary data was chosen because it was verified, complete, and relevant to the analytical needs of the study. The study applied purposive sampling, selecting 38 regencies/cities in East Java Province as the research sample based on specific criteria. The selection criteria included the availability of complete data for all research variables throughout the 2018–2022 period. The choice of purposive sampling was made considering that this technique allowed the researchers to focus on regions that were relevant and possessed characteristics aligned with the study's objectives.

The data used in this study were secondary panel data, comprising ROR, regional expenditure, the labor force, and population size. These data were sourced from the East Java Provincial Statistics Agency and the website of the Regional Financial and Asset Management Agency (RFAMA) of East Java Province. The data analysis technique involved three primary methods: the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) (Winarno, 2015). To determine the most appropriate panel data analysis model, three specification tests were conducted: the Chow test, Hausman test, and Lagrange Multiplier test (Sudirman & Anthoni, 2021). Panel data analysis was utilized as a statistical technique to predict changes in the dependent variable by regressing multiple independent variables simultaneously. The estimated equation model in this study was as follows:

$$Y_i = \alpha + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + e_i$$

Keterangan:

Y_1 : Poverty level
 α : Constant
 $\beta_1, \beta_2, \beta_3, \beta_4$: Regression coefficients
 X_1 : Regional Original Revenue (ROR)
 X_2 : Regional Expenditure
 X_3 : Labor Force
 X_4 : Population
 E : Error term

This model is used to identify and measure the impact of each independent variable on the poverty rate in the research area. Additionally, this study employs Eviews 12 software for panel data analysis. This application was chosen for its extensive statistical capabilities and ease of managing panel data.

4. Empirical Findings/Result

Normality test

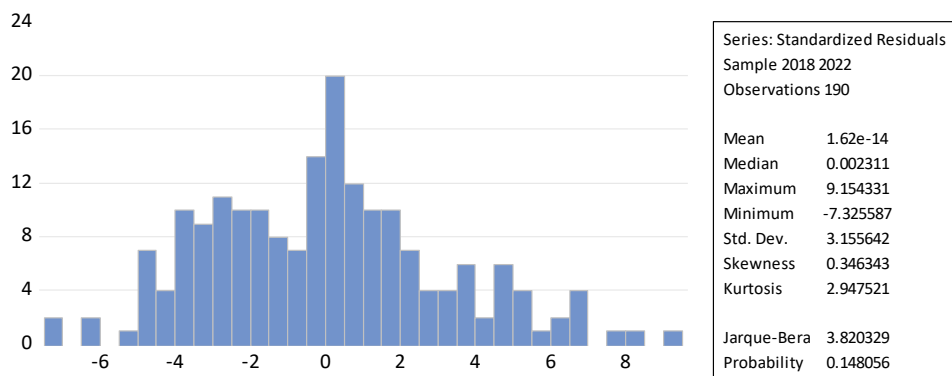


Figure 2. Normality Test Results

Source: Data processed by the researcher, 2023

Figure 2 illustrates the standardized residual distribution from a statistical model based on 190 observations from 2018 to 2022. The residual mean is close to zero (1.62e-14) with a median of 0.002311, indicating no bias. The distribution is nearly symmetrical with slight positive skewness (0.346343) and kurtosis close to 3 (2.947521), supporting the assumption of normality. The Jarque-Bera value of 3.82 with a probability of 0.148056 (>0.05) indicates that the residual distribution is considered normal. A standard deviation of 3.155642 reflects moderate variation unexplained by the model. Overall, the model produces valid residuals that can be used for further analysis without significant violations of statistical assumptions.

Results of regression analysis

Regression analysis using panel data recommends a number of tests to choose the best statistical model for estimate. The Random Effect Model (REM), Fixed Effect Model (FEM), and Common Effect Model (CEM) are the three primary models used in panel data regression analysis. The Hausman Test and Chow Test methods are used to choose one of these three models. Using the probability value as a basis, the Chow Test is used to choose between the Common Effect Model (CEM) and Fixed Effect Model (FEM). Common Effect Model (CEM) is employed if the cross-section chi-square probability value is more than 0.05, and Fixed Effect Model (FEM) is applied if the cross-section value is less than 0.05. Table 1 below provides an overview of the Chow Test findings using the EViews 12 program:

Table 1. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	136.845657	(37,148)	0.0000
Cross-section Chi-square	676.660357	37	0.0000

Source: Data processed by researchers, 2023

The Fixed Effect Model (FEM) is thought to be the most relevant and suitable model for the data analysis requirements as the test results show that the probability value of the cross-section chi-square is less than 0.05. Then, between the Fixed Effect Model (FEM) and the Random Effect Model (REM), the Hausman Test is used to identify which model is preferable for estimate. Assessing the cross-section random's probability value is part of the choice criteria. The Random Effect Model (REM) is used if the cross-section random probability value is larger than 0.05, and the Fixed Effect Model (FEM) is applied if the cross-section random probability value is less than 0.05 (Parlindungan & Rosandi, 2018). Table 2 below provides a summary of the Hausman Test findings using the EViews 12 program.

Table 2. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	36.455427	4	0.0000

Source: Data processed by researchers, 2023

According to the test findings, the Fixed Effect Model (FEM) is thought to be the most relevant and suitable model for the data analysis requirements since the probability value of the cross-section random is less than 0.05 (Purba & Bimantara, 2020). According to the fixed effect method, an object's magnitude remains constant across time. The regression coefficients also don't change over time. The slope for each subject in the Fixed Effect Model (FEM) remains constant across time, while the intercepts for each subject (cross-section) vary. This model posits that although the slope is constant among individuals, the intercept varies. To differentiate one topic from another, dummy variables are used. According to Yasa et al. (2024), the Fixed Effect Model (FEM) makes the assumption that individual differences (cross-section)

may be handled by variances in their intercepts. The dummy variable approach is used to estimate the Fixed Effect Model (FEM) using different intercepts for each participant. The Least Squares Dummy Variable approach, or LSDV for short, is a common name for this kind of estimate model. Table 3 below provides an overview of the multiple linear regression findings using the Fixed Effect Model (FEM) using the EViews 12 application:

Table 3. Results of Multiple Linear Regression Testing using the Fixed Effect Model (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.006446	8.054715	0.869856	0.3858
R-squared	0.985913	Mean dependent var		10.67321
Adjusted R-squared	0.982010	S.D. dependent var		4.480598
S.E. of regression	0.600961	Akaike info criterion		2.011719
Sum squared resid	53.45076	Schwarz criterion		2.729482
Log likelihood	-149.1133	Hannan-Quinn criter.		2.302474
F-statistic	252.6367	Durbin-Watson stat		1.961510
Prob(F-statistic)	0.000000			

Source: Data processed by researchers, 2023

Individual significance test (t-Test)

The individual significance test (t-test) is conducted to examine the influence between independent variables (Purwanti, 2024). The assumption used is as follows: if $t\text{-calculated} < t\text{-table}$, then H_a is rejected; and if $t\text{-calculated} > t\text{-table}$, then H_a is accepted. Based on the regression test results, the t-test results are as follows:

Table 4. Individual Significance Test (t-Test)

Variable	Coefficient	Prob.	t-Statistic	Result
ROR_X1	0.087301	0.6458	0.460544	Not significant
Regional Expenditure_X2	-2.665274	0.0001	-4.117462	Significant
Labor Force_X3	3.880967	0.0044	2.894910	Significant
Population_X4	-0.012734	0.9557	-0.055653	Not significant

Source: Data processed by researchers, 2023

In the testing of Hypothesis 1, the independent variable Regional Original Revenue (ROR) (X1) showed a Prob. t-Statistic value of $0.6458 > 0.05$ for its relationship with the dependent variable, poverty (Y). This indicates that there is no significant relationship between the two variables. In the testing of Hypothesis 2, the independent variable Regional Expenditure (X2) had a significant influence on the dependent variable, poverty (Y), as indicated by a Prob. t-Statistic value of $0.0001 < 0.05$ for the independent variable's effect on the dependent variable (Prawoto & Andriyane, 2018). In the testing of Hypothesis 3, the independent variable Labor Force (X3) showed a substantial influence on the dependent variable, poverty (Y), with a Prob. t-Statistic value of $0.0044 < 0.05$ for the independent variable's effect on the dependent variable. In the results of Hypothesis 4 testing, the independent variable Population Size (X4) did not significantly affect the dependent variable, poverty (Y). This was shown by

the Prob. t-Statistic value for the independent variable population (X4) on the dependent variable poverty (Y), which was $0.9557 > 0.05$. Therefore, based on the equation obtained from the multiple linear regression analysis using the Fixed Effect Model (FEM) presented in Table 4 above:

$$Y_{\text{Poverty}} = 7.00644578794 + 0.0873013251623X_1 - 2.66527374862 X_2 + 3.88096743021 X_3 - 0.0127339651145X_4$$

The regression coefficient value for the variable Regional Own Revenue (ROR) (X1) is 0.0873013251623, as can be seen from the equation above. Given that this value is positive, it suggests that ROR has a beneficial impact on poverty. The proportion of the population living in poverty will rise by 0.09% if ROR (X1) rises by 1%. On the other hand, the proportion of the population living in poverty will drop by 0.09% if ROR (X1) drops by 1%. According to this regression analysis, poverty in East Java Province rises in tandem with each increase in ROR. The variable regional spending (X2) has a regression coefficient value of -2.66527374862. Given that this value is negative, it suggests that regional spending has a detrimental impact on poverty. The proportion of the people living in poverty will drop by 2.66% for every 1% rise in regional spending (X2). On the other hand, the proportion of the population living in poverty would rise by 2.66% if regional spending (X2) falls by 1%.

According to this regression analysis, the proportion of the East Java Province's population living in poverty decreases with each rise in regional spending. For the variable labor force (X3), the regression coefficient value is 3.88096743021. Given that this value is positive, it suggests that poverty is positively impacted by the labor force. The proportion of the population living in poverty will rise by 3.88% if the labor force (X3) grows by 1%. On the other hand, the proportion of the population living in poverty will drop by 3.88% if the labor force (X3) declines by 1%. According to this regression analysis, poverty in East Java Province rises in tandem with every growth in the labor force. For the variable population (X4), the regression coefficient value is -0.0127339651145. Given that this value is negative, it suggests that poverty is negatively impacted by population. A 1% increase in population (X4) will result in a 0.01% drop in the proportion of the people living in poverty. On the other hand, the proportion of the population living in poverty will rise by 0.01% if the population (X4) declines by 1%. This regression analysis demonstrates that as the population grows, the proportion of the East Java Province's population living in poverty decreases.

Simultaneous significance test (F-Test)

The simultaneous significance test (F-Test) is conducted to determine whether the independent variables, collectively (simultaneously), influence the dependent variable. Based on Table 3, the probability value of $0.000000 < 0.05$ is obtained from the F-statistic test results for the independent variables Regional Original Revenue (ROR) (X1), Regional Expenditure (X2), labor force (X3), and Population (X4) on the dependent variable Poverty (Y). This result supports the acceptance of Hypothesis

5, indicating that the independent variables collectively have a significant influence on poverty (Ningrum et al., 2020).

Coefficient of determination (R^2)

The coefficient of determination (R^2) in Table 3 indicates the extent to which the independent variables explain the variation in the dependent variable within the regression model. In this study, the R^2 value of 0.985913 shows that 98.59% of the variation in poverty levels in East Java Province can be explained by the independent variables used, namely Regional Original Revenue (ROR), Regional Expenditure, labor force, and Population. The remaining 1.41% of the variation in poverty levels is explained by factors outside the model that were not included in the analysis. This demonstrates that the model has an excellent predictive capability, as nearly all the variation in the data can be explained by the tested variables.

5. Discussion

During the COVID-19 pandemic, the poverty rate in East Java significantly increased due to economic impacts such as declining household income, job losses, and reduced economic activities. Regression analysis reveals that Regional Original Revenue (ROR) (X1) does not significantly influence poverty, with a Prob.t-Statistic value of 0.6458 (> 0.05). This indicates that ROR-based programs have not made a significant impact on poverty alleviation in East Java. Based on the unbalanced growth theory (Hirschman, 1958), the allocation of ROR, which tends to focus on infrastructure financing without addressing the needs of vulnerable groups, is a contributing factor. Hence, a more responsive allocation of ROR targeting marginalized communities is needed, as emphasized in the capability theory, to ensure a more effective impact on poverty alleviation (Chipango, 2021).

Conversely, economic recovery programs based on increased regional expenditure (X2) significantly reduce poverty, with a Prob.t-Statistic value of 0.0001 (< 0.05) and a regression coefficient of -2.66%. Every 1% increase in regional expenditure decreases the poverty rate by 2.66%. This positive impact aligns with the redistribution with growth theory (Lamba et al., 2019; Schraff, 2019), emphasizing the importance of public resource allocation to enhance community welfare. A study by Sahoo & Ashwani (2020) demonstrates that well-targeted social and infrastructure spending can directly reduce poverty, especially in areas affected by the pandemic.

The labor force (X3) also significantly influences poverty, with a Prob.t-Statistic value of 0.0044 (< 0.05) and a regression coefficient of 3.88%. Despite an increase in the labor force, limited job opportunities, particularly in the formal sector, contribute to rising poverty levels. This supports the dual labor market theory, which explains that the imbalance between the formal and informal sectors exacerbates poverty (Bonilla & Villoslada, 2021; Taba et al., 2023). Structural unemployment remains a key factor in the increase in poverty during the pandemic (Su et al., 2022). Thus, policies integrating labor force growth with job creation are crucial, as suggested by the structural unemployment theory (Tcherneva, 2008).

In contrast, population size (X4) does not significantly influence poverty, with a Prob.t-Statistic value of 0.9557 (> 0.05). This finding suggests that population growth, without targeted education and training policies, does not contribute to poverty reduction. The demographic transition theory highlights the importance of managing population growth through education and workforce training, which can transform population pressure into development opportunities (Purohit, 2023). A study by Widodo & Wulandari study (2024) supports that skill training programs and continuous education enhance community productivity and break the intergenerational poverty cycle.

F-test results demonstrate that ROR, regional expenditure, labor force, and population size collectively have a significant impact on poverty levels. These findings are consistent with prior research, underscoring that regional economic factors, such as ROR and expenditure allocation, play a critical role in poverty reduction through improved infrastructure and public services (Sayvaya & Phommason, 2021). Additionally, the labor force and population size are closely related to poverty, as noted by Li et al. (2021), who argue that the imbalance between job availability and population size exacerbates poverty. Therefore, policies focusing on optimizing ROR, regional expenditure for poverty alleviation programs, and improving labor quality and opportunities can significantly reduce poverty.

The study's findings indicate that ROR does not significantly influence poverty, suggesting that its allocation is not sufficiently responsive to the needs of vulnerable groups. In contrast, increased regional expenditure significantly reduces poverty, supporting the redistribution with growth theory. Meanwhile, an increasing labor force without adequate job opportunities worsens poverty, in line with the dual labor market theory. Population size also does not significantly influence poverty, highlighting the need for population management through education and training. Simultaneously, ROR, regional expenditure, labor force, and population size influence poverty, emphasizing the importance of integrated policies focusing on regional expenditure, job creation, and ROR optimization for poverty alleviation.

Overall, these findings align with previous studies. This research is consistent with Ernawati et al.'s (2021) study, which highlighted the importance of need-based public fund allocation for inclusive growth, particularly in the context of effective regional spending for poverty reduction through community empowerment. The finding that regional spending significantly impacts poverty reduction also supports Nurias et al.'s (2023) results, which demonstrated that government expenditures in the health and education sectors positively reduce poverty. However, these findings contradict Kartika et al.'s (2021) study, which showed that government spending in East Java did not directly affect economic growth or poverty reduction. This study also adds a new dimension regarding the negative impact of ROR on poverty reduction, which has not been extensively discussed in previous studies. A key strength of this study compared to earlier research is its integration of various variables, including ROR and population size, providing a more comprehensive picture of poverty dynamics in East Java. This study also highlights the relevance of development theories such as redistribution and capability theories in explaining its results and offers specific

recommendations for more effective public resource allocation. This study has several limitations that warrant attention in future research. First, it relies solely on secondary data from 38 districts/cities in East Java, limiting the generalizability of findings to other regions with different socio-economic characteristics. Second, the variables analyzed are restricted to ROR, regional expenditure, labor force, and population size, excluding other influential factors such as education quality, healthcare access, and urbanization. Third, the quantitative approach using panel data regression, while statistically robust, does not fully capture social dynamics or qualitative aspects influencing poverty. Future studies should incorporate additional variables, employ mixed-methods approaches for a deeper socio-economic understanding, and expand the geographic scope to achieve more comprehensive, nationally applicable insights.

The study's implications suggest that effective poverty alleviation in East Java requires a comprehensive and targeted approach to managing regional expenditure, the labor force, and job creation. Regional expenditure should focus on community empowerment programs such as skills training, micro-business support, and improved access to education and healthcare to directly impact the welfare of the poor. Additionally, regional expenditure should be inclusively allocated, addressing both large infrastructure projects and basic needs to reduce social inequality. For the labor force, policies should aim to align job creation with labor force growth, especially in the formal sector, to prevent rising unemployment and poverty. Population growth management through education and training is also critical to enhance productivity and break the intergenerational poverty cycle. These findings provide a strategic basis for policymakers to allocate resources effectively, ensuring that poverty alleviation efforts are both impactful and sustainable.

6. Conclusions

Poverty in East Java is influenced by regional economic variables. Regional Original Revenue (ROR) does not significantly affect poverty, indicating suboptimal allocation. In contrast, regional expenditure significantly reduces poverty, supporting the redistribution theory. Growth in the labor force without adequate job opportunities exacerbates poverty, while population size has no significant impact, highlighting the importance of education and training for productivity. Integrated policies that optimize regional expenditure, create jobs, and allocate ROR effectively are essential for poverty alleviation. However, this study is limited to panel data analysis from 38 districts/cities in East Java and does not account for variables such as the Human Development Index (HDI) and urbanization or causal relationships between variables. Further research is recommended to expand the geographical scope, include additional variables, and adopt a causal approach to gain a more comprehensive understanding of poverty dynamics.

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