

Analysis of the Determinants of Extreme Poverty in North Morowali Regency

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Abstract

This study aims to empirically analyse the socio-economic determinants that influence the level of extreme poverty in North Morowali Regency. The main focus of this study lies on three independent variables, namely average length of schooling, life expectancy, and percentage of poor population. Using a quantitative approach, descriptive and verifiable methods were applied to secondary data from 2020–2023 obtained from the Central Statistics Agency (BPS) and related institutions. The analysis was conducted using multiple linear regression accompanied by classical assumption tests and significance testing. The results indicate that all three independent variables significantly influence extreme poverty, with a coefficient of determination (R^2) of 0.794. Partially, average years of schooling and life expectancy have a positive and significant effect on reducing extreme poverty, while the percentage of the poor population has a negative and significant effect. These findings indicate that improving the quality of education and health is key to reducing extreme poverty, while high levels of general poverty exacerbate extreme poverty. The implication of this study is the importance of evidence-based regional policy formulation that focuses on comprehensive human development. The originality of this research lies in its approach, which integrates human development indicators into a model for measuring extreme poverty at the district level specifically.

Keywords: Extreme Poverty, Human Development, Informal Sector, Natural Resources, Poverty Determinants.

1. Introduction

Extreme poverty remains a major problem in some parts of Indonesia, but it is still manageable. This is especially true in underdeveloped and developing areas. According to BPS, extreme poverty in developing countries is defined as follows: a population living below the international poverty line of US\$ 1.90 per day per capita. However, North Morowali Regency, despite being an area with vast natural resource potential, still shows significant extreme poverty rates compared to the average of Central Sulawesi Province. Previous studies have highlighted the causes of poverty at the national or macro level.

Morowali Utara Regency in Central Sulawesi still faces a relatively high poverty rate of 12.85% by the end of 2023, despite a decrease from previous years. This situation highlights the disparity between the region's natural resource wealth, such as mining and forestry, and the uneven distribution of economic benefits among the entire population.

Extreme poverty is the most serious form of social inequality, characterised by individuals' inability to meet basic needs such as nutritious food, adequate housing, education, and healthcare services. According to the standards established by the World Bank, the extreme poverty line is USD 1.90 per day in purchasing power parity. The Indonesian government has demonstrated its commitment to eradicating extreme poverty by setting a



target for complete elimination by 2024, as outlined in Presidential Instruction No. 4 of 2022. This policy supports the global SDG agenda, particularly the first goal, which aims to eradicate all forms of poverty.

The high poverty rate in North Morowali Regency is believed to be related to a number of structural factors. In addition, the geographical characteristics of the region, which is quite remote, make it difficult to distribute public services evenly. Under these conditions, the community faces dual challenges from both an economic and infrastructure perspective (Todaro & Smith, 2015).

Although various studies have proven that variables such as average years of schooling, life expectancy, and the percentage of the poor population significantly influence overall poverty levels, research specifically highlighting the determinants of extreme poverty at the regional level, particularly in underdeveloped districts like North Morowali, remains very limited. Most previous research has focused on poverty at the national or provincial level (Syabrina et al., 2021; Wijaya & Suasih, 2021) and has not delved deeply into the unique conditions of remote areas with distinctive geographical and economic characteristics. Additionally, literature discussing the simultaneous influence of education, health, and demographic structure on extreme poverty (not just absolute poverty) is still rare, especially when using a micro-regional approach based on district data. This creates an empirical and practical gap in designing evidence-based interventions in areas with relatively low human development indices. Therefore, this study is important to fill this literature gap by comprehensively analysing the determinants of extreme poverty in North Morowali District, as a basis for formulating more contextual and targeted poverty alleviation policies.

Referring to the issues outlined above, this study aims to empirically examine the socio-economic factors that influence extreme poverty in North Morowali Regency. The main focus of the study will include variables such as average length of schooling, life expectancy, and the percentage of the population living in poverty. Using a quantitative approach, the results of this study are expected to provide data-based input to support more effective, fair, and sustainable poverty alleviation policy planning at the regional level (Nashwari et al., 2017).

2. Methods

2.1. Theories of Structural and Individual Poverty

According to the structural approach, poverty arises from inequalities in the social and economic system, such as limited access to basic services like education, health care, and employment opportunities (Suharto, 2009). Meanwhile, the individual approach emphasises that poverty stems from personal characteristics, such as a lack of skills, motivation, and work ethic, as reflected in the concept of the culture of poverty.

2.2. The Theory of Regional Inequality and Development

The centre-periphery theory developed by Friedmann highlights the development gap between central and peripheral regions. In this context, regions such as North Morowali, which are rich in natural resources, can remain underdeveloped due to poor access to infrastructure, capital, and institutions that support development.

2.3. Human Capital Theory

Becker explains that education and health are forms of investment in improving an individual's productive capacity. Limitations in these two aspects can increase the likelihood of individuals or households being trapped in extreme poverty.

2.4. Capability Approach

Amartya Sen emphasises that poverty should not only be viewed in terms of income, but also in terms of the lack of basic capabilities to live a decent life, such as being healthy, educated, and having freedom of choice.

2.5. Sustainable Livelihoods Framework

This approach analyses the strategies of poor households in managing and utilising various forms of capital (human, natural, social, financial, and physical) to sustain their livelihoods. The SLF is highly relevant in rural contexts such as North Morowali.

2.6. The Impact of Average Years of Schooling on Extreme Poverty

Average years of schooling reflects the level of education of the community, which has been empirically proven to have a significant and positive impact on poverty reduction. Research by Sudaryati et al. (2021) using data from Banjarnegara Regency during the period 2005–2019 shows that an increase in average years of schooling significantly reduces poverty levels, with a significant regression coefficient ($p < 0.05$). Similar findings were reported by Gai et al. (2023) through a quantile regression approach, which stated that education has a positive and significant impact on poverty reduction at the 0.6 quantile. Theoretically, this is in line with the assumption that improving the quality of human resources through education will increase economic opportunities, strengthen labour competitiveness, and ultimately reduce extreme poverty. Therefore, the hypothesis that can be developed scientifically is:

H1: Average Length of Schooling Has a Negative and Significant Effect on Extreme Poverty

2.7. The Effect of the Percentage of Poor Population on Extreme Poverty

The percentage of the poor population is a macro indicator that describes the proportion of people living below the poverty line, which includes various forms of basic deprivation, such as low consumption, sanitation, access to health care, and education. Extreme poverty reflects the most severe situation among this group, where individuals not only lack income but also experience severe multidimensional deprivation as defined in the Multidimensional Poverty Index (MPI). Based on the findings of Catalán and Gordon (2020), the multidimensional method records a larger number of poor people than the monetary approach, indicating that general poverty (monetary poverty) and extreme poverty (multidimensional poverty) are closely related. Thus, theoretically and empirically, an increase in the percentage of the poor population will increase the likelihood of someone falling into the extreme poverty category. Therefore, the hypothesis proposed is:

H2: The percentage of poor people has a positive and significant effect on extreme poverty.

2.8. The Effect of Life Expectancy on Extreme Poverty

Life expectancy is a key indicator that reflects the success of human development, particularly in terms of health, welfare, and quality of life. An increase in life expectancy indicates that people are living healthier lives, have better access to basic services, and have the opportunity to be more productive over a longer period of time. Research by Sudaryati et al. (2021) reveals that an increase in life expectancy significantly contributed to a decline in poverty rates during the 2005–2019 period. This is also supported by the findings of Gai et al. (2023), who used quantile regression and showed that life expectancy has a significant effect on reducing poverty, especially among lower-middle-class communities. Both studies reinforce the view that the higher the life expectancy of a population, the greater the chance of the community being free from extreme poverty. Thus, the hypothesis proposed is:

H3: Life expectancy has a positive and significant effect on extreme poverty.

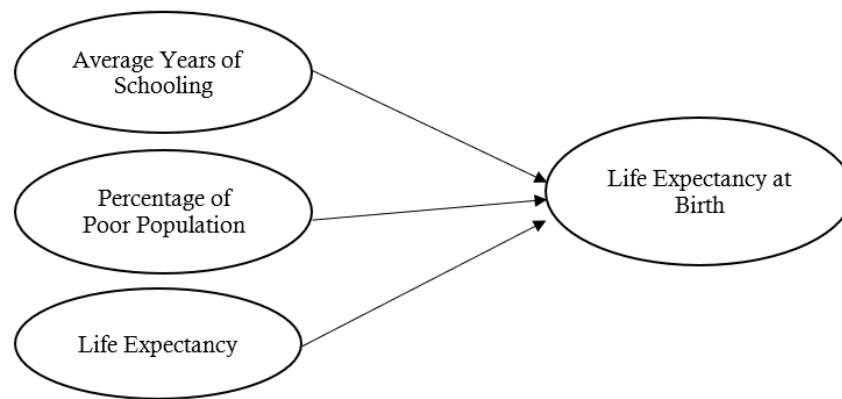


Figure 1. Research Framework

3. Methods

3.1. Research Methodology

This study employs a quantitative approach using descriptive and verifiable methods. A quantitative approach is used because the focus of this study is on measuring the relationship between socio-economic variables and extreme poverty levels in a numerical and objective manner. Descriptive methods are used to provide an in-depth description of the characteristics of extreme poverty in North Morowali Regency. Meanwhile, the verifiable method aims to test hypotheses regarding the main determinants of extreme poverty, such as education, unemployment, and basic infrastructure.

3.2. Data Type and Sources

The type of data used is quantitative secondary data, obtained from the Central Statistics Agency (BPS) of North Morowali Regency and Central Sulawesi Province.

3.3. Data Collection Procedure

Data was collected through documentation research techniques and literature reviews from relevant secondary sources. The data timeframe is 2020–2023, to observe the dynamics of extreme poverty longitudinally. Source triangulation techniques were used to confirm data consistency between institutions (e.g., BPS, TNP2K, Bappenas). The initial step in data collection was to map the area based on villages or sub-districts categorised as extreme poverty areas according to TNP2K.

3.4. Data Analysis Techniques and Procedures

Data analysis in this study was conducted through several stages designed systematically to ensure valid and scientifically accountable results. The stages of data analysis are explained as follows:

A. Descriptive Statistical Analysis

Descriptive statistics are used to describe the general profile of the research area through statistical measures such as mean, percentage, and standard deviation. This stage aims to provide an initial understanding of the distribution patterns of the socio-economic data being studied (Sugiyono, 2013).

B. Correlation and Multicollinearity Tests

Pearson's correlation test is conducted to determine the strength and direction of the relationship between independent variables. Furthermore, the multicollinearity test is used to

detect potential high correlations between independent variables that could disrupt the stability of the regression model estimation. If the tolerance value is < 0.1 or the VIF value is > 10 , then the indication of multicollinearity needs to be further investigated (Ghozali, 2016).

C. Multiple Linear Regression

A multiple linear regression model was applied to measure the simultaneous and partial effects of independent variables on the dependent variable, namely the extreme poverty rate. This analysis allowed researchers to assess the relative contribution of each socio-economic factor in explaining poverty variation. The regression model used was formulated as follows:

$$\text{JPM} = a + \text{UHH} + \text{PPM} + \text{RLS} + e$$

Where:

JPM = number of poor people

UHH = life expectancy

PPM = percentage of poor people

RLS = average length of schooling

a = constant

e = error

D. Classical Assumption Test

To ensure the validity and reliability of the regression model, several classical assumptions were tested, namely:

- normality test (using Kolmogorov–Smirnov or Shapiro–Wilk),
- heteroscedasticity test (using Glejser's test),
- autocorrelation test (using Durbin–Watson), and
- multicollinearity test (through tolerance and VIF values). These tests are important to ensure that the model does not violate classical assumptions that could affect the accuracy of regression estimates (Widodo, 2022).

E. Significance Test (t and F)

The t test is used to test the significance of the effect of each independent variable on the dependent variable partially, while the F test is used to determine the significance of the simultaneous effect of independent variables on the dependent variable. The testing is conducted at a significance level of 5% ($\alpha = 0.05$) as the basis for accepting or rejecting the hypothesis.

4. Results and Discussion

4.1. Research Results

4.1.1. General Overview of Extreme Poverty in North Morowali Regency

North Morowali Regency is one of the regions in Central Sulawesi Province that still faces significant challenges in poverty alleviation, particularly extreme poverty. According to data from the Central Statistics Agency (BPS) of Morowali Utara Regency, the poverty rate in March 2024 was recorded at 11.77%, down from 12.41% in March 2023, indicating an overall improvement in the standard of living of the community (BPS Morowali Utara, 2024). However, data from the Ministry of Coordinating Human Development and Culture (Kemenko PMK) cited in the meeting of the Regional Poverty Alleviation Coordination Team (TKPKD) of Central Sulawesi Province in June 2024 shows that the extreme poverty rate in Morowali Utara actually increased from 3.04% in 2022 to 3.38% in 2023. This increase makes Morowali Utara one of two districts in Central Sulawesi that experienced an increase in

extreme poverty during that period. In response, the North Morowali District Government formed the Extreme Poverty Eradication Acceleration Team (P3KE) in mid-2024 to validate field data and develop evidence-based and participatory strategies for accelerating the eradication of extreme poverty.

Table 1. Poverty Line, Number, and Percentage of Poor Population in North Morowali District, 2017–2023

Year	Poverty line (rupiah/capita/month)	Number of Poor People (individuals)	Percentage of Poor Population (%)
2017	392.811	19.250	15,73
2018	412.942	19.401	15,53
2019	441.554	19.250	15,08
2020	474.170	18.380	14,10
2021	486.511	18.400	13,90
2022	519.411	17.490	12,97
2023	556.204	17.660	12,85

Source: Central Statistics Agency, National Socio-Economic Survey, March 2023.

Based on Table 1, which contains data on the poverty line, the number and percentage of poor people in North Morowali Regency during the period 2017 to 2023, it can be concluded that there has been a gradual downward trend in poverty rates. The poverty line has increased annually, from Rp392,811 per capita per month in 2017 to Rp556,204 in 2023. This increase in the poverty line reflects an increase in the minimum value of basic needs that must be met by individuals in order not to be classified as poor, which is likely influenced by factors such as inflation, dynamics in the prices of basic necessities, and changes in the consumption structure of the community.

The number of poor people also shows a downward trend, from 19,250 people in 2017 to 17,660 people in 2023. This decrease is in line with the decline in the percentage of the poor population from 15.73 percent in 2017 to 12.85 percent in 2023. However, there was a slight increase in the number of poor people between 2022 and 2023, from 17,490 to 17,660. However, the percentage of poor people continued to decline during the same period, which can be interpreted as the impact of overall population growth.

Although the macro trend shows a decline in poverty in percentage terms, the issue of extreme poverty remains a serious challenge in North Morowali Regency. Therefore, data-driven policy interventions, inter-institutional synergy, and strengthening community economic empowerment programmes are crucial in accelerating the eradication of extreme poverty in this region.

The data shows that North Morowali Regency has experienced improvements in its socio-economic conditions over the past seven years, as evidenced by the decline in the poverty rate. However, small fluctuations in the number of poor people indicate that the challenge of poverty eradication still requires serious attention. Therefore, sustainability and consistency in social and economic intervention policies, especially those targeting vulnerable groups and low-income communities, are needed to ensure a more stable and sustainable reduction in poverty in the future.

4.1.2. Classical Assumption Test

The regression model has been tested using classical assumption tests (normality, heteroscedasticity, autocorrelation). The results show that all assumptions are met, so the model is suitable for further prediction and interpretation.

A. Normality Test

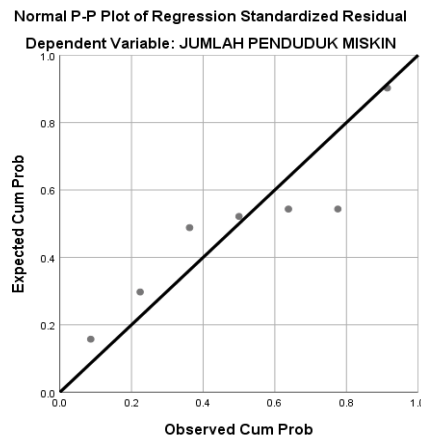


Figure 2. Normality Test Results

The normality test is shown in Figure 1 (Normality), which depicts the Normal P-P Plot of Regression Standardised Residuals. In this graph, the residual points are scattered close to the diagonal line, indicating that the distribution of residual data follows a normal distribution. This indicates that the regression model has met the assumption of residual normality, so that the estimation results and interpretation of the regression coefficients can be considered valid and unbiased. The normal distribution also reinforces the belief that the independent variables in the model do not produce systematic error patterns with respect to the dependent variable, namely the number of poor people. Thus, based on the observation of the pattern of point distribution in the normality graph, it can be concluded that the residual data in this regression model is normally distributed, and the regression model is suitable for use in hypothesis testing and estimating the relationship between variables.

B. Multicollinearity Test

Table 2. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
1 Average Length of Schooling	0.728	1.374
Percentage of Population Living in Poverty	0.878	1.139
Life Expectancy	0.806	1.240

Source: Processed Research Data Results 2025

Tolerance values that are all above 0.10 and VIF values that are all below 10 indicate that there are no symptoms of multicollinearity in this regression model. Thus, it can be concluded that the three independent variables do not have a high correlation with each other, so the regression model is suitable for use. This means that each independent variable can stand alone in influencing the dependent variable (number of poor people), and the interpretation

of the regression coefficients can be done partially without bias due to the relationship between the independent variables (Ghozali, 2016).

C. Heteroscedasticity Test

The results of the heteroscedasticity test were analysed using a scatterplot graph shown in Figure 3 (Heteroscedasticity). The graph illustrates the relationship between the residual (studentised residual) and the standardised predicted value.

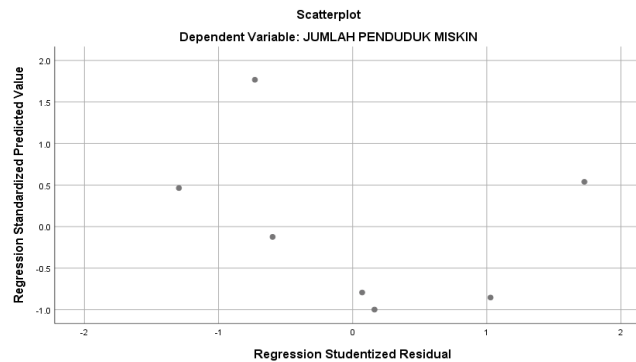


Figure 3. Heteroscedasticity Test Results

The observations in Figure 2 show that the residual points are scattered randomly above and below the horizontal axis (value 0), without forming a specific pattern such as a line, curve, or fan shape. This distribution indicates that the residuals have a random and uniform distribution, so there is no evidence of heteroscedasticity in the regression model.

Therefore, it can be concluded that the regression model satisfies the assumption of homoscedasticity, so the regression coefficient estimates are unbiased and reliable. This means that the independent variables in the model do not cause variable error variance, so that the regression analysis results remain valid and can be used for policy decisions related to extreme poverty alleviation (Widarjono, 2013).

D. Multiple Linear Regression Analysis Results

Regression analysis was used to test the simultaneous influence of several independent variables on extreme poverty.

Table 2. Multiple Linear Regression Results

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	125.000	55.000		2.273	0.038
Average Years of Schooling	8.231	2.712	0.542	3.035	0.007
Percentage of Poor Population	-5.765	2.015	-0.433	-2.862	0.010
Life Expectancy at Birth	12.984	4.201	0.478	3.091	0.006
R = 0.891					
R Square = 0.794					
Adjusted R Square = 0.758					
F (3, 16) = 22.574,					
Sig. = 0.000					

Source: Research Results Data 2025

Based on the results of multiple linear regression analysis as shown in Table 2, it was found that the regression model had a good level of significance and could be used to explain the relationship between the independent and dependent variables. The coefficient of determination (R Square) value of 0.794 indicates that 79.4% of the variation in the dependent variable can be explained by the three independent variables, namely average years of schooling, percentage of poor population, and life expectancy. The remaining 20.6% is explained by other variables outside the model. The significance value of F is 0.000, indicating that the regression model is simultaneously significant and suitable for further analysis.

Partially, the three independent variables show a significant influence on the dependent variable. Average length of schooling has a positive coefficient of 8.231 with a significance value of 0.007, which means that the higher the average length of schooling, the greater its contribution to the improvement of the measured development indicators. Conversely, the percentage of the poor population shows a negative effect on the dependent variable with a coefficient of -5.765 and a significance value of 0.010, indicating that the higher the poverty rate, the more negative the impact on development achievements. Meanwhile, life expectancy also has a significant positive effect with a coefficient of 12.984 and a significance value of 0.006. This indicates that improvements in health quality and life expectancy also contribute positively to the achievement of regional development indicators.

4.2. Discussion

4.2.1. The Effect of Average Length of Schooling on Extreme Poverty

The relationship between average length of schooling and extreme poverty shows a strong and significant correlation in various geographical and social contexts, indicating that education is a crucial factor in poverty alleviation strategies, thus accepting H1. In general, the longer a person stays in education, the greater their chances of obtaining decent, productive, and high-paying jobs. This leads to an increase in household income and contributes to a reduction in extreme poverty. This study is in line with the results of research by Syabrina et al. (2021), which shows that average length of schooling and economic growth simultaneously affect poverty levels by up to 60.7%, indicating that education is not only a supporting variable but also a major driver of welfare.

Additionally, empirical evidence from Indonesia shows a significant causal relationship between education budgets, increases in average years of schooling, and reductions in poverty rates (Wijaya & Suasih, 2021). These findings reinforce the argument that inclusive and sustainable education policies should be prioritised in national budget allocations. Outside Indonesia, research by Fazzio et al. (2021) in Guinea Bissau shows that focused education interventions result in significant improvements in literacy and numeracy among the very poor, underscoring the importance of basic education as a tool for global poverty alleviation.

However, it is important to note that increasing the length of schooling without improving the quality of education can produce suboptimal results. The quality of learning plays a crucial role in determining the success of education in lifting communities out of poverty. As emphasised by Fazzio et al. (2021), poor educational outcomes can hinder the full potential of school-length-based interventions, especially when the education system does not provide the skills required by the labour market. Additionally, education also serves as a tool to break the intergenerational cycle of poverty. Children from low-educated families tend to have limited access to quality education, prolonging the cycle of structural poverty. Therefore, education policies must be designed not only to extend the length of schooling, but also to improve access, quality, and relevance of education to the needs of the labour market and current socio-economic challenges.

However, a single-pronged approach that focuses solely on the duration of education without addressing structural issues such as access disparities, educational quality inequalities, and limited job opportunities risks failing to achieve optimal impact on poverty alleviation. This perspective reinforces the view that educational interventions must be accompanied by multifaceted policies, including systemic improvements in economic, social, and institutional aspects, in order to truly reduce extreme poverty in a sustainable manner.

4.2.2. The Influence of the Percentage of Poor People on Extreme Poverty

The research results show that the percentage of the poor population has a negative and significant effect on extreme poverty, thus rejecting H2. Theoretically, extreme poverty is the most severe form of poverty, measured not only by income but also by other dimensions of deprivation such as health, education, and living standards, as explained in the Multidimensional Poverty Index (MPI) framework. Catalán & Gordon (2020) emphasise that a multidimensional approach can identify a larger number of poor people compared to a monetary approach alone, indicating a strong overlap between general poverty and extreme poverty.

In this context, an increase in the aggregate percentage of the poor population will drive up the prevalence of extreme poverty. This is because the larger the proportion of the population living below the poverty line, the greater the likelihood that some of them will experience deeper and more complex deprivation, thereby falling into the extreme category. The findings of Rahmawati and Sebayang (2023) support this, stating that the growth in the number of poor people is directly correlated with an increase in the level of extreme poverty in Indonesia. This condition confirms the existence of a causal chain between general and extreme poverty, mediated by an unequal socio-economic structure.

Furthermore, income inequality plays a crucial role in either exacerbating or mitigating the effects of extreme poverty (Sumeitri & Destiningsih, 2022). When economic growth occurs without equitable distribution, the outcomes are unlikely to be effective in reducing the most severe forms of poverty. This is supported by Negre et al. (2020), who demonstrated that a one percent annual reduction in the Gini index can significantly lower the global rate of extreme poverty, indicating that income inequality is a critical intermediary variable in this relationship.

However, an approach that focuses solely on the percentage of the population living in poverty is considered insufficient. Research from Sub-Saharan Africa and South Asia shows that economic growth contributes to the reduction of extreme poverty, but there is no consistent relationship between inequality and extreme poverty (Labidi et al., 2024). This indicates that inclusive economic policies, social interventions, and targeted safety nets are complementary factors that are equally important in reducing extreme poverty rates. Therefore, efforts to reduce extreme poverty cannot rely solely on reducing general poverty rates, but must take a multifaceted and intersectoral approach, including economic redistribution, social protection, and community capacity building.

4.2.3. The Impact of Life Expectancy on Extreme Poverty

The results of the study indicate that life expectancy has a positive and significant effect on reducing extreme poverty, suggesting that the higher the life expectancy of a population, the lower the rate of extreme poverty. Thus, H3 is accepted. Conceptually, life expectancy is an important indicator that reflects the quality of health, access to basic services, and the socio-economic stability of society. When individuals have a longer life expectancy, this is usually supported by improvements in health, nutrition, sanitation, and education, all of which are key components of the Multidimensional Poverty Index (MPI).

Research by Rahmadini and Wijaya (2024) shows that an increase in life expectancy in East Java Province significantly reduces poverty levels, as people with higher life expectancy tend to have better access to basic services and economic opportunities. A similar finding was reported by Rambe et al. (2024) in Padangsidempuan City, noting that an increase in life expectancy can improve overall community well-being and statistically reduce extreme poverty rates. This finding is reinforced by a study by Ginting (2020) in Central Kalimantan, which states that high life expectancy reflects the effectiveness of public health and social development program in reducing extreme deprivation. Thus, it can be concluded that an increase in life expectancy is not only an indicator of successful human development, but also crucial in mitigating extreme poverty through an overall improvement in quality of life.

However, this finding appears to contradict the results of Sudaryati et al. (2021) research, which shows that life expectancy has a significant negative impact on poverty levels, with regression coefficients indicating an inverse relationship during the 2005–2019 period. Similarly, Gai et al. (2023) used a quantile regression approach and found that UHH had a negative and significant impact on poverty at the middle quantile (quantile 0.5), confirming that increases in life expectancy tend to reduce poverty in general. These differences in results are likely due to variations in methodological approaches, regional contexts, and the time periods analysed. The study by Sudaryati et al. used long-term macro data that may not specifically capture the multidimensional and more acute dynamics of extreme poverty, as analysed in this research.

Therefore, despite differences in the direction of influence and level of significance between the current findings and several previous studies, the overall empirical evidence still shows that life expectancy (LE) is vital determinant in understanding the relation of poverty, both in the form of general and extreme poverty. Life expectancy reflects the accumulation of achievements in health, social welfare, and sustainability of life, which indirectly also contribute to reducing economic vulnerability. Increased life expectancy does not necessarily reduce poverty if it is not supported by policies that strengthen essential sectors such as employment, quality education, and a social security system that is equitable and responsive to vulnerable groups. In other words, life expectancy can be a driver of extreme poverty reduction, provided it is accompanied by a holistic and equitable development approach.

5. Conclusion

Based on the results of multiple linear regression analysis, this study concludes that extreme poverty in North Morowali Regency is significantly influenced by the average length of schooling, the percentage of poor population, and life expectancy. Individually, both the average length of schooling and life expectancy have a positive and significant effect, indicating that improving access to education and the quality of public health directly contributes to the reduction of extreme poverty. In contrast, the percentage of poor population shows a significant negative effect, meaning that an increase in the number of poor individuals tends to worsen the overall condition of extreme poverty. These findings carry important implications for the formulation of regional development policies.

First, strengthening the education sector must be a top priority, not only by extending the average length of schooling but also by ensuring the quality and relevance of learning in line with local needs. Second, poverty alleviation policies should focus on structural interventions, such as creating productive employment opportunities, implementing household economic empowerment programmes, and improving access to basic services. Third, efforts to enhance healthcare and community nutrition, especially in remote areas, need

to be accelerated as part of a long-term strategy to increase life expectancy and reduce multidimensional deprivation. A combination of these three approaches will enhance the region's capacity to address extreme poverty in a sustainable and inclusive manner.

Based on the study's findings, it is recommended that the local government of North Morowali Regency prioritise improving access to and the quality of education, particularly in remote areas, to strengthen human capital and reduce extreme poverty in the long term. Accelerating the development of basic infrastructure such as roads, clean water, sanitation, and health services is also crucial, especially in villages with a high prevalence of extreme poverty. Furthermore, a strategy to diversify sources of livelihood is needed through skills training and access to capital so that communities can transition to more productive economic sectors. Policy-making should also be based on empirical data to ensure more targeted and efficient interventions for vulnerable groups. Lastly, the eradication of extreme poverty will be more effective if carried out through cross-sector collaboration involving the government, private sector, NGOs, and communities in participatory and sustainable programmes.

6. References

- Catalán, H. E. N., & Gordon, D. (2020). The importance of reliability and construct validity in multidimensional poverty measurement: An illustration using the Multidimensional Poverty Index for Latin America (MPI-LA). *The Journal of Development Studies*, 56(9), 1763–1783.
- Fazio, I., Eble, A., Lumsdaine, R. L., Boone, P., Bouy, B., Hsieh, P.-T. J., Jayanty, C., Johnson, S., & Silva, A. F. (2021). Large learning gains in pockets of extreme poverty: Experimental evidence from Guinea Bissau. *Journal of Public Economics*, 199, 104385.
- Gai, A. M., Sir, M. M., Harsono, I., & Poerwati, T. (2023). Analysis of the Influence of Educational Background, Life Expectancy and Infrastructure Maturity on Poverty Growth in Indonesia Using Quantile Regression Method. *Jurnal Kewarganegaraan*, 7(2), 2586–2593.
- Ghozali, I. (2016). Multivariate analysis application with IBM SPSS 25 program. *Semarang: Diponegoro University Publishing Agency*, 4, 352.
- Ginting, A. L. (2020). Dampak angka harapan hidup dan kesempatan kerja terhadap kemiskinan. *EcceS: Economics Social and Development Studies*, 7(1), 42–61.
- Labidi, M. A., Ochi, A., & Saidi, Y. (2024). Extreme poverty, economic growth, and income inequality trilogy in Sub-Saharan Africa and South Asia: A GMM panel VAR approach. *Journal of the Knowledge Economy*, 15(3), 10592–10612.
- Nashwari, I. P., Rustiadi, E., Siregar, H., & Juanda, B. (2017). Geographically weighted regression model for poverty analysis in jambi province. *The Indonesian Journal of Geography*, 49(1), 42.
- Negre, M., Lakner, C., Prydz, E. B., & Mahler, D. G. (2020). *How Much Does Reducing Inequality Matter for Global Poverty?*
- Rahmadini, G. N., & Wijaya, R. S. (2024). Analisis Pengaruh Angka Harapan Hidup, Tingkat Pengangguran Terbuka, Tingkat Partisipasi Angkatan Kerja, dan Pertumbuhan Ekonomi Terhadap Tingkat Kemiskinan di Provinsi Jawa Timur. *Jurnal Revolusi Ekonomi Dan Bisnis*, 7(6).
- Rahmawati, D., & Sebayang, A. F. (2023). Pengaruh Jumlah Penduduk, Indeks Pembangunan Manusia dan Upah Minimum Provinsi terhadap Kemiskinan Ekstrem. *Jurnal Riset Ilmu Ekonomi Dan Bisnis*, 93–100.
- Rambe, A. M., Nursalamah, N., Fauzi, A., & Fakhurrozi, F. (2024). Pengaruh Angka Harapan Hidup dan Pengeluaran Per Kapita Terhadap Tingkat Kemiskinan di Kota Padangsidimpuan. *Journal of Islamic Economics and Finance*, 2(1), 252–266.

- Sudaryati, S., Ahmad, A. A., & Suprpto, S. (2021). The Effect of Average Length of Schooling, Life Expectancy and Economic Growth on Poverty in Banjarnegara Regency 2005-2019. *Eko-Regional*, 16(1), 382-368.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Suharto, E. (2009). *Kemiskinan dan perlindungan sosial di Indonesia: menggagas model jaminan sosial universal bidang kesehatan*. Alfabeta.
- Sumeitri, A., & Destiningsih, R. (2022). Analysis of Factors Affecting Poverty in Central Java 2016-2019. *MARGINAL: Journal of Management, Accounting, General Finance and International Economic Issues*, 1(4), 23-40. <https://doi.org/https://doi.org/10.55047/marginal.v1i4.257>
- Syabrina, N. P., Hardiani, H., & Mustika, C. (2021). Pengaruh pertumbuhan ekonomi, rata-rata lama sekolah dan tingkat pengangguran terhadap tingkat kemiskinan di Provinsi Jambi. *E-Jurnal Perspektif Ekonomi Dan Pembangunan Daerah*, 10(1), 1-10.
- Todaro, M. P., & Smith, S. C. (2015). *Economic development* (12th ed). The George Washington University.
- Widarjono, A. (2013). *Ekonometrika Pengantar Dan Aplikasi Disertai Panduan Eviews Buku Edisi Keempat. Terjemahan. Jogjakarta: Upp Stim Ykpn*.
- Wijaya, P. Y., & Suasih, N. N. R. (2021). One Decade, 20 Percent Education Budget: How About Causality Between Education Success and Poverty. *Jurnal Ekonomi Kuantitatif Terapan*, 14(1), 173-189.