



Factors that Determine the Level of Poverty in the Province East Nusa Tenggara

Viola Bella Adelia^{1*}, Riko Setya Wijaya²

^{1,2} Departments of Economic Development, National Development University "Veteran" East Java

Article Information

History of article:
Received July 2024
Approved October 2024
Published October 2024

ABSTRACT

The issue of poverty is still a global topic of conversation. Poverty is still related to limited employment opportunities, and someone who does not work is poor. Meanwhile, someone is categorized as poor if they do not have an inadequate level of education and health. The strategic problems in East Nusa Tenggara Province have similarities to the problems faced by the central government, namely the high poverty rate. As for solving problems other than development and equality in East Nusa Tenggara Province, for the central authorities, namely eradicating the problem of poverty in NTT Province, is a fundamental issue and has priority to be addressed. Therefore, to determine the percentage of poor people in East Nusa Tenggara Province, which is ranked third out of 10 provinces in eastern Indonesia, researchers used several factors such as Gross Regional Domestic Product (GRDP), increase in Human Resources such as education and workforce, and the number of residents. Researchers use quantitative panel data linear regression methods with the aim of finding out the factors that impact poverty. So that it will produce future policies to reduce the poverty rate in NTT Province.

Keywords: Poverty, Regional Economy, Education, Labor Force

JEL Classification Code: O12, O15, O18, R11, R13

© 2024 MediaTrend

Author correspondence:

E-mail: violabellaadelia629@gmail.com

DOI: <http://dx.doi.org/10.21107/mediatrend.v19i2.26527>

2460-7649 © 2024 MediaTrend. All rights reserved.

INTRODUCTION

The event of individual misery has an identity, namely when a person or a group of people are unable to meet the level of welfare related to their economy because it is a basic need of a person's standard of life. Meanwhile, a person will be categorized as poor if they do not get the right level of education and health. In terms of efforts, every country has tried to alleviate poverty in each country through programs that they have certainly made. The first effort is that the government can meet their needs from various fields through education, health, employment, and many more to protect families and community groups. The second effort is that the government can prevent new poverty by providing coaching facilities to the community to have the ability to do something.

This can certainly be diversified so that people can adjust to their abilities and then can be applied to their daily lives. Therefore, after the two efforts are chosen, of course this will lead to the emergence of an appropriate policy.

The policy regarding poverty alleviation itself needs to be precise. The existence of a schedule regarding empowerment for the poor in Indonesia itself has not

really experienced accuracy and appropriateness in handling poverty alleviation. The close relationship between the problem of the economic growth rate of the population then gives birth to unemployment, social inequality in the distribution of national income and development, and education which is the main capital to be able to compete in the world of work is the meaning of poverty (Nurhasanah et al., 2019). This is because policies on development and various resolutions often lack consideration of the characteristics and local context of the poor. One of the most important things in following up on a problem related to poverty is the importance of a poverty data so that it becomes the main material and a view of steps by the government.

Based on the table, it can be seen that the Percentage of Poor Population by Province and Region from 2018 to 2022, the percentage of the poor population in September 2022 was 9.57 percent, an increase of 0.03 percentage points compared to March 2022 and a decrease of 0.14 percentage points compared to September 2021 (CSA, 2023). Meanwhile, the percentage of poor people in East Nusa Tenggara Province for the eastern part of Indonesia has occupied the third position for the last four years. In 2019, the percentage

Table 1.
Percentage of Poor Population by Eastern Indonesia Province in 2019-2022
(Percent)

Province	Percentage of Poor Population by Province (Percent)			
	2019	2020	2021	2022
Papua	26.55	26.8	27.38	26.8
West Papua	21.51	21.7	21.82	21.43
East Nusa Tenggara	20.62	21.21	20.44	20.23
Maluku	17.65	17.99	16.3	16.23
Gorontalo	15.31	15.59	15.41	15.51
Central Sulawesi	13.18	13.06	12.18	12.3
Southeast Sulawesi	11.04	11.69	11.74	11.27
West Sulawesi	10.95	11.5	11.85	11.92
South Sulawesi	8.56	8.99	8.53	8.66
North Sulawesi	7.51	7.78	7.36	7.34
North Maluku	6.91	6.97	6.38	6.37

Source: Central Bureau of Statistics

of poor people in East Nusa Tenggara Province was 20.62 percent. The increase occurred in 2020, which was 21.21 percent. Furthermore, in 2021 the percentage showed a decrease in confidence of 20.44 percent. Then the decline also occurred again in 2022, namely 20.23 percent for East Nusa Tenggara Province.

The strategic problem in East Nusa Tenggara Province (NTT) has something in common with the problem being faced by the central government, namely the high poverty rate. The solution to problems other than development and equity in East Nusa Tenggara Province for the central authority, namely eradicating the problem of poverty in NTT Province is a fundamental issue and has received priority to be handled. Development in the fields of education and health is a pillar to organize individuals in economic development is a kind of long-duration capital development for a country. In addition, the high poverty rate in an area cannot be decided just because of one factor. Population wage gain, unemployment, fitness, education, access to commodities and services, location, geography, gender, and environment are factors that are interrelated with complex problems that affect poverty (Novriansyah, 2018).

Based on observations by Ashari & Athoillah (2023) explained that all variables, namely the Open Unemployment Rate, Labor Force Participation Rate, Minimum Wage, HDI, Economic Growth and Population Total, simultaneously have a significant effect on poverty in the Horsehoe Area. The Open Unemployment Rate has a significant positive effect. The Employment Budget Participation Rate, Minimum Wage, Human Development Index, and Economic Growth had a significant negative effect. Although there are differences in the place in the study, the results of these observations show that some similarities in the use of variables for these regions have an effect on poverty.

Based on observations (Putriana & Aji, 2022), the poverty variable and the Labor Force Participation Rate (TPAK) variable have a significant effect on economic growth in D.I.Y. Province the education variable does not have a significant effect on economic growth in D.I.Y. Signikan only occurs in two districts for the other areas have no effect.

Improvements in human resources that continue to increase are mainly related to labor for the country's economy, but there is a weakness, namely slowness in the absorption of labor. The question of manpower is a very elusive and evolving one. Ambiguous is caused because this problem can have an effect and is given an effect by many factors. As well as developing because every time the number of people will increase and this problem concerns.

Improvements in human resources that continue to increase are mainly related to labor for the country's economy, but there is a weakness, namely slowness in the absorption of labor. The question of manpower is a very elusive and evolving one. Ambiguous is caused because this problem can have an effect and is given an effect by many factors. As well as developing because every time the number of people will increase and this problem concerns millions of people. This obstacle causes an effect on one of the factors, namely unemployment. This will certainly cause the level of unemployment to increase.

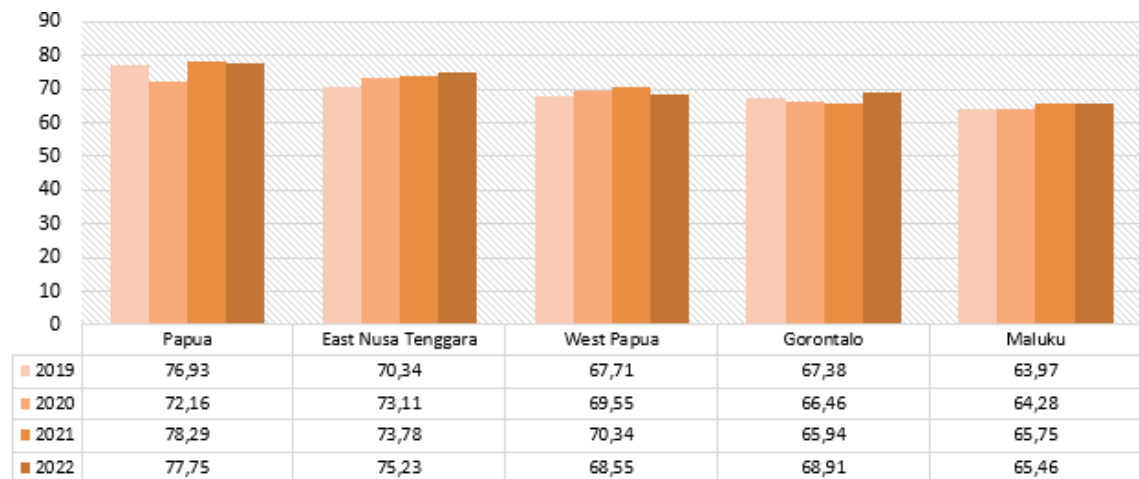
Hacking the problem to give an overview of future applicants is not easy. This condition is due to the existence of applicants in the previous period and the need to find an implementation view in the period after. If a person carries out his work well, of course the output is good, the wages obtained by individuals are decent, and the quality of human resources is a problem, including often present when discussing related to labor in addition to the problem of industrial networks between

workers and a business.

East Nusa Tenggara Province annually experiences an increase in the Labor Force Participation Rate (TPAK). Starting from 2019, East Nusa Tenggara Province for the Labor Force Participation Rate (TPAK) is confident at 70.34 percent. Furthermore, in 2020 the Labor Force Participation Rate (TPAK) increased to 73.11 percent, in contrast to Papua, which decreased by 72.16 percent. Furthermore, East Nusa Tenggara Province (NTT) for the Labor Force Participation Rate (TPAK) has increased again, namely 73.78 percent in 2021. Then in 2022, the increase occurred again at the Labor Force Participation Rate (TPAK) of 75.23% percent. If you look at the data, the labor force growth is relatively increasing, but job applications in East Nusa Tenggara Province are still limited.

can pursue higher education, it will certainly have an impact on the acquisition of knowledge so that it makes them educated personnel. Educated personnel will help themselves to get out of the trap of poverty, spread knowledge while educating, and also have an impact on the increase in GDP and GNP.(Ashari & Athoillah, 2023).

Talking about this phenomenon can be associated with poverty and a person's inability to think. In this situation, a person is unable to think well to meet his needs and survive. Therefore, there needs to be a benchmark in the use to see the level of poverty in the population, namely in educational parameters. Education is basically an individual's conscious effort to increase knowledge, intelligence, and knowledge. Education also has the purpose of empowering students who are subjects and objects for the sustainability of life to be much



Source: Central Bureau of Statistics

Figure 1.
Labor Force Participation Rate by Eastern Indonesia Province in 2019-2022 (Percent)

The Labor Force Participation Rate is one of the factors influencing economic activities that have an impact on output, so that the population with high productivity will get an increase in output as well. Because, quality human beings are due to high education and education is one of the important things, so the meaning of the workforce was born. If the population

improved. Education also has a role in intensifying the quality of human resources which has an impact on the field of education, both official and non-official.

State regulations have also clarified that every citizen has the right to education. Education intended by state regulations is an education rooted in the qualities of faith, state customs, and awareness of

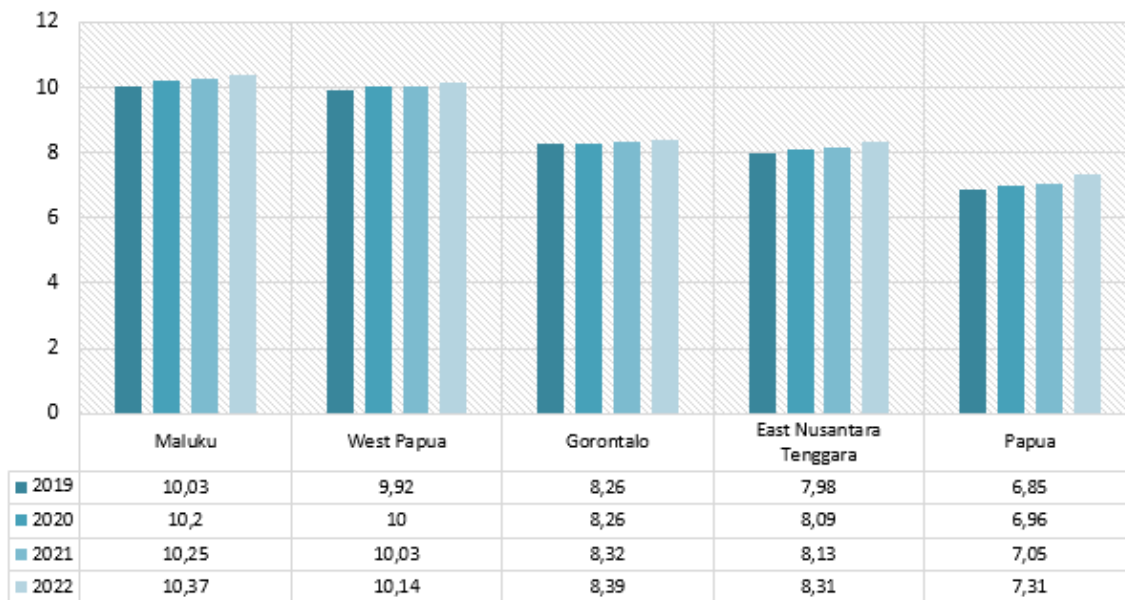
the changes of the era. There is an educational goal, namely the alignment of comprehensive education that is inherent in the national education system.

The existence of stability of opportunities, relevance of education and development, quality of education, and accuracy for control are the four core of the education development scheme. The purpose of this equal distribution of opportunities is that there is an overall distribution of facilities and infrastructure to be used for learning, such as an increase in the number of teaching staff and the feasibility of the building for the sustainability of the teaching and learning process. The purpose of relevance of education and development is to connect the existing education system to employment. The importance of improving the standard of living of all levels of citizens, and building the dignity of the state and nation, therefore the government is trying to give serious attention to overcome various problems in the field of improving education from the primary, secondary, to tertiary levels, namely efforts to eradicate

ignorance in fighting poverty in the nation's life through education (Pristiwanti et al., 2022).

In addition to education, there are also wages that have an impact when someone has succeeded in fighting for education and adjusting to the current company criteria. This is because companies today have high requirements to become employees of the company. Education also causes us to avoid poverty because we ultimately avoid unemployment. In the end, this will lead to two possibilities, namely the acceptance of a person in all companies and someone being able to open their own business. Both of these things show that a person will earn income that can be used to meet their needs.

Based on the observation from Pristiwanti et al., (2022) of economic views, investment in the form of an educated and diligent workforce is the meaning of education. Efforts to improve the quality of human resources so that they become a better workforce are an element of the goal of education. To give birth and improve the



Source: Central Bureau of Statistics

Figure 2.
Average School Length of Population Aged 15 Years and Older by Eastern Indonesia Province in 2019-2022 (Percent)

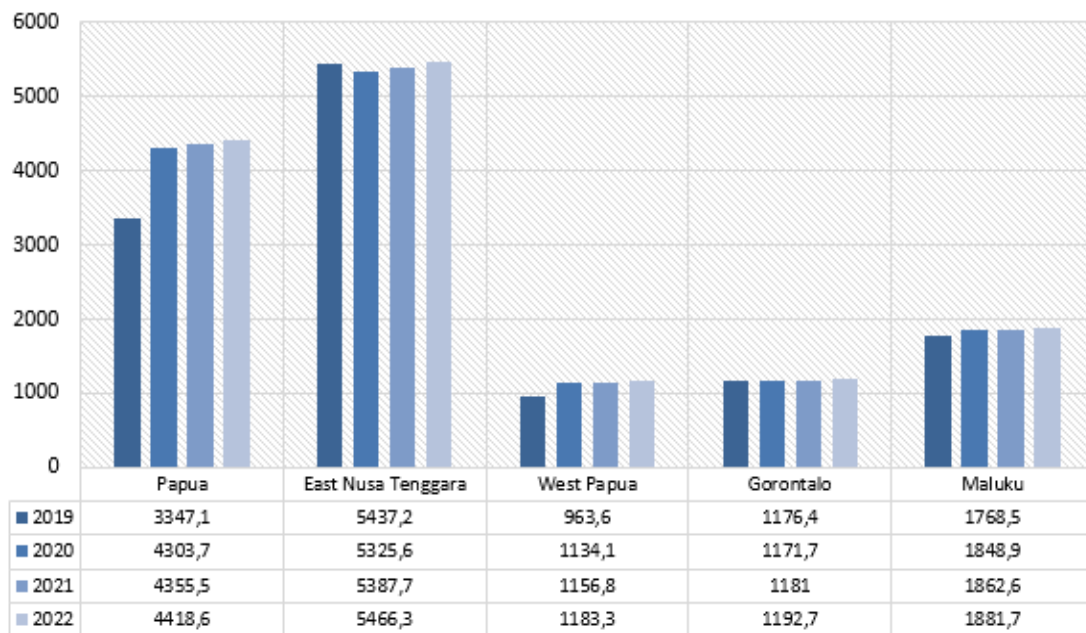
quality and productivity of individuals, it is necessary to have education about psychomotor and cognitive will help individuals in showing an idea. The quality produced by education will provide benefits to the workforce who have field and theoretical experience.

Therefore, the question is important for each individual because it is an asset for the population to be free from the problem of poverty. If a person is able to pursue higher education, of course he will obtain an increase in his individual qualities. One of the reasons that affects poverty in the field of education is determined through the average length of schooling. The average length of schooling in the population can be seen from the level of the population in undergoing education. Individual education that has been taken in the number of elementary years shows a high average length of schooling.

East Nusa Tenggara Province itself is in fourth place out of five provinces in

eastern Indonesia. East Nusa Tenggara Province shows an increase every year. The existence of the average length of schooling itself is proof that the average year of the population of East Nusa Tenggara Province is 15 years old. In 2019, East Nusa Tenggara Province averaged 7.98 percent of school length. Furthermore, in 2020, the average length of schooling for the population of East Nusa Tenggara Province is believed to be 8.09 percent. In 2021, despite changes to online learning media in Indonesia, East Nusa Tenggara Province showed an increase, namely at 8.13 percent. East Nusa Tenggara Province in 2022 the increase is still confident at 8.31. However, the increase that occurred in East Nusa Tenggara Province still shows that the average year of the population of East Nusa Tenggara Province for the age of 15 years is still adrift with the Provinces of Maluku, West Papua, and Gorontalo.

Poverty can also occur due to differences in income levels, geography,



Source: Central Bureau of Statistics

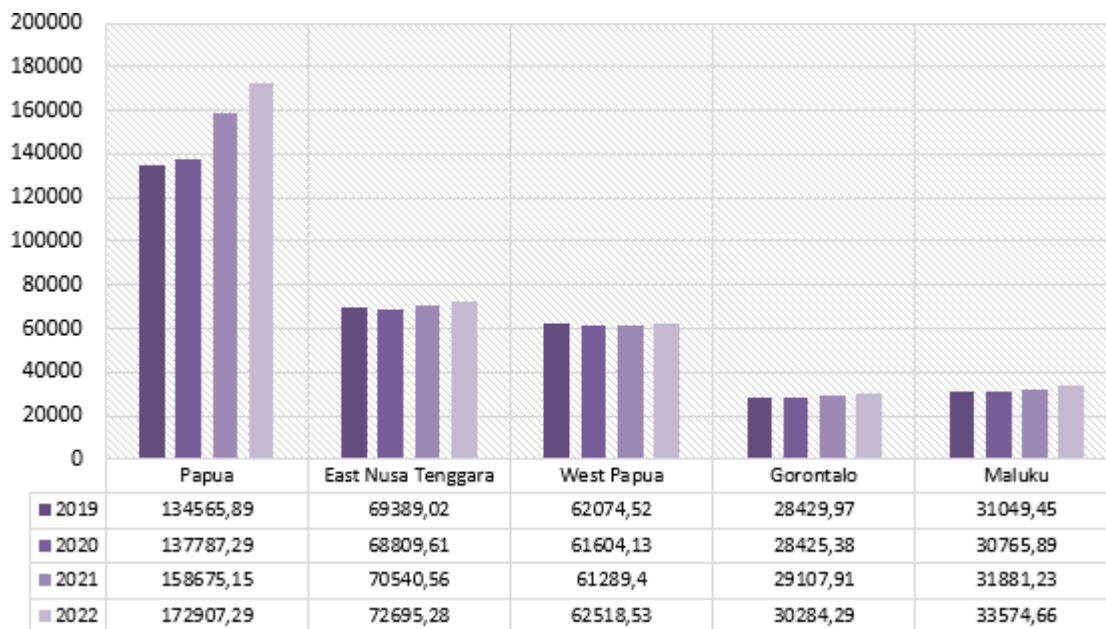
Figure 3.
Number of Population by Eastern Indonesia Province in 2019-2022 (Thousand Persons)

population, natural resources, and human resources. The fundamental problem in an area regarding economic development is the number of populations. This phenomenon is caused when economic development is not achieved due to uncontrolled population growth. This is because, if economic development can be achieved, welfare will also be felt by the community and the poverty rate will be suppressed. Thus, the drivers and hindrances of development depart from the development of the population in an area. The number of populations is a driving factor due to the large number of labor levels, market area and goods which are based on two things, namely income and the community or the number of populations.

East Nusa Tenggara Province has the largest population of the five provinces. The population in East Nusa Tenggara Province has fluctuated. In 2018 the number of people in East Nusa Tenggara Province was 5437.2 thousand people. Furthermore, in 2020 there was a decrease of 111.6

thousand people from the previous year to 5325.6 thousand people. In 2021, there was an increase of 5387.7 thousand people and is still ranked first out of five provinces for eastern Indonesia. Then in 2022 the increase occurred again in East Nusa Tenggara Province, which was 5466.3 from the previous year and remained the province with the highest population for the eastern part of Indonesia. The high population in East Nusa Tenggara Province will have an impact on high unemployment and low productivity. Therefore, the number of people has a great influence on the percentage of the poor population.

The factors that cause poverty in an area cannot be driven by just one factor. Gross Regional Domestic Product (GDP) is also one of the factors that cause poverty in an area. This is because when an increase occurs in GDP regardless of whether the increase is large or small, so that a region knows about the rate of economic growth. Economic development cannot be based on the Gross Regional Domestic



Source: Central Bureau of Statistics

Figure 4.
Gross Regional Domestic Product on the Basis of Constant Prices 2010 by Eastern Indonesia Province in 2019-2022 (billion rupiah)

Product (GDP) but it is necessary to look at the dissemination to the population about the figure who has participated in enjoying the results regarding the distribution of opinions obtained.

If a region experiences a decline in Gross Regional Domestic Product (GDP), it will certainly have an impact on the quality of household consumption. Households will be forced to change their consumption both in terms of food and other needs to cheaper products with a reduced number of goods. This condition occurs if the distribution of residents' opinions becomes limited. Gross Regional Domestic Product (GDP) is one of the indicators of a region regarding economic growth. The final value of goods and services obtained through regional economic activities in a certain period of time is the meaning of the Gross Regional Domestic Product (GDP). The increase in an area related to the Gross Regional Domestic Product (GDP) states that the government is able to overcome the problem of poverty.

Based on observations from (Damanik & Sidauruk, 2020) Gross Regional Domestic Product (GDP) in the provincial (regional) area explains the ability of the region to produce added value (output) at a certain time. This in determining the Gross Regional Domestic Product (GDP) needs an approach. The approach is to the production of both processed and consumed goods, as well as users where these are used by consumers or will be marketed.

East Nusa Tenggara Province itself is in second position out of five provinces in the eastern part of Indonesia. East Nusa Tenggara Province in 2019 had a Gross Regional Domestic Product (GDP) of 69389.03 billion rupiah. Furthermore, it decreased in 2020, namely to 68809.61 billion rupiah of Gross Regional Domestic Product (GDP) in East Nusa Tenggara Province. In 2021 to 2022, the increase occurred in the Gross Regional Domestic Product (GDP). For 2021 70540.56 billion

rupiah and in 2022 72695.28 billion Rupiah Gross Regional Domestic Product (GDP) of East Nusa Tenggara Province.

Based on observations from Firmansyah & Khairunnisa (2023) explained that the variables of the average length of schooling and Gross Regional Domestic Product show a relationship between poverty levels. The labor force participation rate shows a significant absence. However, when compared between the Gross Regional Domestic Product and the average length of schooling, it shows that the average length of schooling has the greatest influence and impact on reducing poverty. In the observance, there are regional differences, but the variables in the observation are the same as the observations in the researcher. So that these observations can provide a view of the impact on education for the emphasis on the percentage of the poor.

Based on observations from (Alfionika et al., 2021) show that the poverty level in Regencies/Cities in Jambi Province has a significant influence on economic growth, unemployment rate, education level and TPAK together. Meanwhile, partially, significant and negative influences on the poverty rate are on the variables of economic growth and education levels while there is no significant influence on the poverty rate in Regencies/Cities in Jambi Province, namely the variables of the unemployment rate and the level of labor force participation.

This research directs searches related to East Nusa Tenggara Province which is ranked third out of 10 provinces in the eastern part of Indonesia as its destination. Another goal is to use determinants, namely Gross Regional Domestic Product (GDP), Human Resources (HR) in education and labor force, and geofraficialism in the number of populations. Through these factors, it can be analyzed which has an impact on the percentage of the poor, output, income and added value in the economy.

Higher average school length and labor force participation (LFP) both reduce poverty, but they do so through different mechanisms. According to Human Capital Theory, education enhances skills and productivity, which supports long-term poverty reduction through better job prospects and higher income. Pristiwanti et al., (2022) note that "education raises human quality, directly impacting productivity". However, its benefits may be limited without sufficient job opportunities, as seen in East Nusa Tenggara.

Conversely, Labor Market Theory suggests that LFP reduces poverty more directly by increasing immediate household income. Ashari & Athoillah (2023) found that greater workforce participation lowers poverty rates by expanding economic output and earnings, while Ariyanti, (2024) observes that "higher LFP increases income per capita and spending," which directly benefits poverty reduction in the short term. Thus, while education builds lasting economic resilience, LFP provides a quicker route to poverty alleviation by raising incomes directly.

The relationship between total population, GDP, and poverty is shaped by the Inclusive Growth Theory, which emphasizes that economic growth must be equitable to effectively reduce poverty. While GDP growth can potentially lower poverty rates, studies in East Nusa Tenggara show that without fair distribution, these gains often bypass the impoverished (Kevin et al., 2022). Inclusive Growth Theory suggests that targeted job creation, education access, and health infrastructure are crucial to ensuring GDP growth benefits the poorest communities.

Similarly, population growth can impact poverty, as Malthusian theories suggest that rapid growth strains resources, which increases poverty. In East Nusa Tenggara, high population growth has heightened poverty due to limited jobs and economic opportunities (Suwito, 2020).

However, inclusive policies that link population growth with economic investment can help reduce poverty by enhancing employment and resource access. Both GDP growth and population size influence poverty by affecting jobs, income distribution, and access to services. Effective poverty reduction requires strategies that ensure growth reaches all levels of society.

This study diverges from previous research that primarily focuses on national data or urban contexts. Instead, it specifically analyzes the factors influencing poverty in the province of East Nusa Tenggara (NTT), including Gross Regional Domestic Product (GRDP), average years of schooling, labor force participation rates, and population size. This research pays particular attention to the unique socio-economic context of NTT, which distinguishes it from other regions in Indonesia.

Furthermore, this study aims to address existing gaps in the literature. Notably, findings from previous research, such as that conducted by Hasanah et al., (2021) indicated that average years of schooling do not have a significant relationship with poverty reduction in several areas. By employing a panel data approach and econometric modeling, this study is able to identify the specific factors that most significantly affect poverty levels in NTT. This approach enables the researchers to formulate policy recommendations that are more relevant and context-specific, given the unique conditions in NTT, where limited job opportunities and low GRDP present major challenges to enhancing the effectiveness of education as a tool for poverty alleviation.

METHODOLOGY

The quantitative method is the method chosen in analyzing the data in the study. Quantitative research is in analyzing using statistical analysis, as well as a research method with an inductive, factual, and scientific character in which data is

obtained in the form of numbers or affirmations related to the data are assessed. Proof and rejection are functions of quantitative research on a theory. In addition, there is quantitative research to obtain explanations related to a theory or hypothesis and can be coupled through the application of mathematical forms so that the calculation results can be accounted for.

In addition, the application of this study requires a panel data regression analysis method. Panel data regression analysis is a combination of a set time interval and a region. The purpose of this study is to find out the influence of binding variables and independent variables. The following is a regression equation using a linear model, namely:

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \beta_4 X4_{it} + e_{it}$$

where Y is percentage of poor population, e is variable interrupt/error term, t is year studied (2019-2022), i is observation (21 district areas, namely West Sumba Regency, East Sumba Regency, Kupang Regency, South Central Timor Regency, North Central Timor Regency, Belu Regency, Alor Regency, Lembata Regency, East Flores Regency, Sikka Regency, Ende Regency, Ngada Regency, Manggarai Regency, Rote Ndao Regency, West Manggarai Regency, Central Sumba Regency, Southwest Sumba Regency, Nagekeo Regency, East Manggarai Regency, Sabu Raijua Regency, Malacca Regency, and 1 city area, namely Kupang City), β_0 is constant, $\beta_1, \beta_2, \beta_3, \beta_4$ is regression coefficient of each variable, X1 is average school length (percent), X2 is labor force participation rate (percent), X3 is total population (thousand persons), X4 is gross regional domestic product (billion rupiah)

In estimating the linear regression model of the panel data method, there are three approaches to conducting analysis tests, namely: Common Effect Model, Fixed Effect Model, and Random Effect

Model.

a. Common Effect Model

The common effect model is the simplest technique for performing a panel data approach. This model is carried out as an estimate of the model using Ordinary Least Square (OLS).

b. Fixed Effect Model

A fixed effect model is a model that can be estimated through the least square dummy technique and its parameters are unknown because there are different effects from individuals.

c. Random Effect Model

The random effect model can lead to more efficient estimation because it is able to save the use of degrees of freedom. Random effects models are more suitable to be used to analyze data with a higher level of complexity.

In knowing and determining the model to be used between the Common Effect Model, Fixed Effect Model and Random Effect Model. So it is necessary to test each of these models by the following method:

a. Chow Test

Choose a common effect model or a fixed effect model by conducting a security test through a fixed effect model. The Hypothesis Test is based on:

H_0 : Common Effect Model (CEM)

H_a : Fixed Effect Model (FEM)

The decision is submitted if the basis of the assumption is as follows:

H_0 is accepted if, the p-value > 0.05

H_a is accepted if, the p-value < 0.05

b. Hausman Test

The Hausman test is a statistical test to choose whether Fixed Effect or Random Effect is the most appropriate to use. Hausman has a statistical value, namely, the selection of a fixed effect model occurs if:

H_0 : Common Effect Model (CEM)

H_a : Random Effect Model (REM)

The decision is submitted if the basis of the assumption is as follows:

H_0 is accepted if, the p-value > 0.05

H_a is accepted if, the p-value < 0.05

c. Lagrange Multiplier Test

The Lagrange Multiplier test (LM) is a test to choose which model to use between common effect and random effect. The following is a hypothesis test:

H_0 : Common Effect Model (CEM)

H_a : Random Effect Model (REM)

The decision is submitted if the basis of the assumption is as follows:

H_0 is accepted if, the p-value > 0.05

H_a is accepted if, the p-value < 0.05

Classical assumption, several tests are needed to ensure that the model used is good, including testing for multicollinearity, heteroscedasticity, and autocorrelation (Pambuko & Masrini, 2023). The following are the multiple linear regression tests that will be used, namely:

a. Multicollinearity Test

The Multicollinearity Test carried out to detect whether there is a correlation or relationship between independent variables in the regression model

b. Heteroscedasticity Test

The Heteroscedasticity test to see whether there is an inequality of residual variance from one observation to another in the regression model. One of these tests is the Glesjer test to see the regression of the absolute residual value on the independent variable. If the probability value of more than > 0.05 , it can be declared free of heteroscedasticity.

RESULTS AND DISCUSSION

Descriptive Statistics

Variable descriptive statistical measurements are used to determine data in general such as Mean, Median, Maximum, Minimum, and standard deviation of each variable, namely RLS(X1), TPAK(X2), JP(X3), PDRB(X4), and PPM(Y). The results of the Descriptive Statistical Test can be seen in table 1.

Based on the results of the Descriptive Test, we can describe the distribution

of the data obtained, namely:

The RLS variable (X1) shows a maximum value of 11.61000 while the minimum value is 5.960000, the mean value is 7.551932, the median value is 7.375000, and the standard deviation of RLS data is 1.076094.

The TPAK variable (X2) shows a maximum value of 83.33000 while the minimum value is 58.75000, the mean value is 72.68375, the median value is 72.30500, and the standard deviation of TPAK data is 5.156767.

The JP variable (X3) shows a maximum value of 17138.13 while the minimum value is 750.1500, the mean value is 3231.991, the median value is 2345.780, and the standard deviation of JP data is 3177.579.

The GDP variable (X4) shows a maximum value of 469673.0 while the minimum value is 72800.00, the mean value is 248565.5, the median value is 256107.5, and the standard deviation of GDP data is 104039.6.

Determination of Regression Models

Regression testing on panel data in obtaining a good model and there are three models, namely the Common Effect Model, Fixed Effect Model and Random Effect, and Random Effect Model. Based on the estimates of each model, the models are shown in Table 2.

The Common Effect Model of all variables showed significant with the probability value for RLS which was 0.00, TPAK which was 0.03, JP which was 0.00, and GDP which was 0.00 obtained the number below 0.05. Fixed Effect Model variable that shows significance is in TPAK and JP with a probability value of 0.00, the acquisition is below 0.05. The variables that are not significant in the Fixed Effect Model are in RLS with 0.21, and GDP variables with a probability of 0.34. The Random Effect Model variable that shows significant is in TPAK and JP with a probability value

Table 1.
Descriptive Statistics

	PPM	RLS	TPAK	JP	PDRB
Mean	21.48432	7.551932	72.68375	3231.991	248565.5
Median	22.53500	7.375000	72.30500	2345.780	256107.5
Maximum	34.62000	11.61000	83.33000	17138.13	469673.0
Minimum	8.610000	5.960000	58.75000	750.1500	72800.00
Std. Dev	7.041287	1.076094	5.156767	3177.579	104039.6

Source: Data processed, 2024

Table 2.
Model Estimation Results with Various Methods

Estimation Method	CEM	FEM	REM
Variable			
RLS	-5.714698*** (11.61333)	-0.489155** (2.869637)	-0.702069*** (2.737692)
TPAK	0.422454*** (0.991286)	-0.060845*** (0.017495)	-0.062069*** (0.016868)
JP	0.001632* (0.139590)	-0.002094*** (0.000562)	-0.001149*** (0.000330)
PDRB	-3.63E05*** (9.81E06)	-4.54E06*** (4.80E06)	-2.30E06*** (4.49E06)

*) Significant Level 1%, **) Significant Level 5%, *) Significant Level 10%

Source: Data processed, 2024

Table 3.
Chow Test Results

Effects Test	Statistics	D.F.	Prob.
Cross-section F	698.376334	(21.62)	0.0000
Cross-section Chi-square	481.392098	21	0.0000

Source: Data processed, 2024

of 0.00 each. The insignificant variables in the Random Effect Model are in RLS with a probability of 0.06 and GDP of 0.60.

Based on the results of the Chow Test regression, the probability value is located in the Corss-section Chi-Square, which is 0.0000, which means that the acquisition is smaller than the significant value, which is $\alpha = 0.05$. Therefore, the HO was rejected and the HA was accepted. Until the results show that in this Chow Test, the selected model is the Fixed Effect Model (FEM).

Based on the regression results of

the Hausman Test, the probability value is located in the Corss-section random, which is 0.0042, which means that the gain is smaller than the significant value, which is $\alpha = 0.05$. Therefore, the H_0 was rejected and the HA was accepted. Until the results show that in this Hausman Test, the selected model is Fixed Effect Model (FEM). After performing the Hausman Test, the Lagrange Multiplier Test is not required to perform an intermediate test Common Effect Models and Random Effect The due model has found the best model for testing in this study.

Classical assumption

The Multicollinearity Test carried out to detect whether there is a correlation or relationship between independent variables in the regression model. It is necessary to observe the Variance Inflation Factor value < 1. The result show that the independent variables have a VIF value < 1.00 it is not affected by multicollinearity.

Dutching the results of regression testing on heteroscedasticity in research shows that the value the probability of each independent variable is above 0.05. Therefore, it can be concluded that in the study there was no heteroscedasticity between independent variables. The selected model is free from heteroscedasticity.

riety between individuals, but there is no variation between the times. Meanwhile, at all times and between individuals, it has a good constant independent variable slope. Gains can be checked through the following table 6. Based on the table 7, the following regression equation model is obtained:

$$PPM_{it} = 37.4976 - 0.489155RLS_{it} - 0.060845TPAK_{it} - 0.002094JP_{it} - 0.00000454PDRB_{it} + \epsilon$$

The acquisition of the constant value in the model of 37.4976 has a meaning, namely if all independent variables are considered to be cash, then the Percentage of Poor Population will be 37.4976.

Table 4.
Hausman Test Results

Test Summary	Chi-Sg. Statistic	Chi-Sg. D.F.	Prob.
Cross-section random	15.267430	4	0.0042

Source: Data processed, 2024

Table 5.
Multicollinearity Test Result

	RLS	TPAK	JP	PDRB
RLS	1.000000	-0.396762	0.776853	0,289242
TPAK	-0.296762	1.000000	-0.401068	0.050588
JP	0.776853	-0.401068	1.000000	0.673426
PDRB	0.289242	0.050688	0.673426	1.000000

Source: Data processed, 2024

Table 6.
ARIMA Parameter Estimation Results

	FEM
Heteroscedasticity Test	28.06673 (0.00000)

Source: Data processed, 2024

Regression Result Analysis

Based on the results of the above model test, this study uses the Fixed Effect Model. The Fixed Effect Model is a regression model in the data panel where the estimation stage is obtained with a va-

The coefficient value obtained in the variable of the average length of school is -0.489155 while the probability shows 0.2150. It can be concluded that if the variable of the average length of schooling decreases in each unit, it will be followed by

a decrease in the percentage of the poor population of 0.489155 assuming that the other variables are constant.

The coefficient value obtained in the variable of labor force participation rate is -0.060845 while the probability shows 0.0009. It can be concluded that if the variable of the labor force participation rate decreases in each unit, it will be followed by a decrease in the percentage of the poor population of 0.060845 assuming that the other variables are constant.

The coefficient value in the population variable is -0.002094 while the probability shows 0.0004. It can be concluded that if the variable of population number decreases in each unit, it will be followed by a decrease in the percentage of poor population of 0.060845 assuming that the other variables are constant.

value of $0.2150 > \alpha$ which is 0.005. The results show that H_0 was accepted and H_a was rejected, it can be concluded that the variable of average length of schooling does not have an insignificant effect on the percentage of poor people in East Nusa Tenggara Province.

The acquisition of this observation is in line with the observations of others with observations from (Jannah & Sari, 2023). In his observation, he also obtained a probability value of $0.2510 > 0.005$. The researcher also explained that the hypothesis in his observation was proven. So that the average length of school has no effect on the percentage of poverty. This problem is caused by the fact that productivity in an area is not high so that the welfare of individuals is not achieved.

Table 7.
ARIMA Correlogram Results of LE, MYS, and PCE

Variable	Coefficient	t-Statistic	Prob.
C	37.49760	13.06702	0.0000
RLS	-0.489155	-1.252681	0.2150
TPAK	-0.060845	-3.477770	0.0009
JP	-0.002094	-3.724889	0.0004
GDP	-4.54E-06	-0.946078	0.3478
F-Statistic		1055.881	
Prob(F-Statistic)		0.00000	
R-Squared		0.997657	
Adjusted R-Square		0.996712	

Source: Data processed, 2024

The coefficient value in the gross regional domestic product variable is -0.00000454 while the probability shows 0.3478. It can be concluded that if the variable of gross regional domestic product decreases in each unit, it will be followed by a decrease in the percentage of the poor population.

Based on the acquisition of hypothesis tests on observations, it is stated in the average variable of school length with the acquisition of t-count which is $-1.252681 < t$ table which is 1.98896 and a probability

In addition, it was also explained in the observation (Hasanah et al., 2021) where the acquisition of probability values for the variable of the average length of schooling showed no significant effect. Conditions like this are due to residents residing in an area completing education, including elementary school to junior high school (SMP) until now for the population. It is evident that in the year taken, namely 2019 to 2022, it shows that the average length of schooling in the region is decreasing. So, residents can already feel educa-

tion up to high school (SMA) only in a few areas. The surge in education shows that the spread of poverty has not been evenly distributed to the district, and it is indicated that it is only given to Kupang City but has been given comprehensively to the district.

Based on the hypothesis test in the observation, it is stated in the variable of the labor force participation rate with the t-count of $-3.477760 > t$ table of 1.98896 and the probability value of $0.0009 < \alpha$ which is 0.05. It can be concluded that H_0 was rejected and H_a was accepted where the variable of labor force participation level had a significant negative effect on the percentage of poor people in East Nusa Tenggara Province.

The acquisition of this observation is in line with (Sembiring et al., 2020) that the variable of labor force participation rate shows a negative and significant influence. According to him, if the labor force participation rate is low, it is certainly one of the causes of poverty. Poverty is not only about unemployment, but low income is also one of the causes of poverty. This condition is because many poor people have wages but are classified as poverty due to the lack of labor productivity of the population. So that this problem becomes relevant in the influence of poverty.

Furthermore, observations with harmonious gains also occurred in Desmawan et al., (2023) with a positive and significant influence. The results show the contribution between the level of labor force participation in explaining the poverty variable. The existence of the level of labor force participation also explains the labor force. Capital in the driving force of the economy is in the labor force. This problem is due to the fact that over time there will be changes in the composition and number of the workforce. When this happens, it will certainly have a positive impact on economic growth and the community will get wages to meet their needs so that it will stimulate poverty.

Based on the acquisition of hypothesis tests on observations, it is stated in the population number variable with the acquisition of t-count, which is $-3.724889 > t$ table, which is 1.98896 and the probability value of $0.0004 < \alpha$, which is 0.05. It can be concluded that H_0 was rejected and H_a was accepted, because the variable population had a significant negative effect on the percentage of poor people in East Nusa Tenggara Province.

This is in line with the observations made by (Adella et al., 2021) which had a significant negative effect. The harmony is due to the fact that if the population experiences a spike, the poverty rate will decrease. In addition, in order to know economic growth and the workforce, we can see through the number of populations. This is because, at the turn of the year, the number of people tends to change. Population growth is still continuous with the level of poverty to the welfare of the community. Because if there is a surge in births, it will cause a family to experience the burden of costs and the deterioration of its economic condition into a burden of dependence.

In addition, this observation is justified in the observation from Fathurohman et al., (2022) showing a positive and significant influence. The existence of the population is an illustration of the quantity and percentage of the situation of the nearest population. But if the population is dominated by unemployment, it shows that a surge in the quantity of the population will have an impact on the number of labor force as well. If this happens, of course the effect will be felt on economic growth in the region. If this happens, many individuals will not be able to meet their needs. This also has an impact on the welfare of the population.

Based on the acquisition of hypothesis tests on the observation of the Gross Regional Domestic Product (GDP) variable with the t-calculation of $-0.946078 < t$ table of 1.98896 and the probability value

of $0.3478 > \alpha$ of 0.05. The conclusion can be drawn if H_0 is accepted and H_a is rejected, and that the Gross Regional Domestic Product (GDP) variable does not have an insignificant effect on the percentage of poor people in East Nusa Tenggara Province.

This observation is in line with Shaleh et al., (2021) obtained the Gross Regional Domestic Product (GDP) variable with a negative effect. Gross Regional Domestic Product (GDP) is used to understand and accelerate the economy. This means that there is an increase in goods and services. Of course, this will provide a reduction in poverty, because the population is synonymous with sufficient needs. It is also in line with explaining that the Gross Regional Domestic Product (GDP) variable has no effect. Gross Regional Domestic Product (GDP) and poverty have a strong continuity, because when starting development, poverty experienced a surge in. In addition, when poverty will experience a decrease if development is at the completion stage (Ritonga & Wulantika, 2020).

Therefore, in a region, the acceleration of economic growth is an important matter. This condition is due to the fact that if there is an acceleration in economic growth, it will certainly reduce the number of poor people. The impact of this is that poverty becomes more suppressed again. In fact, poverty is one of the indicators of success in a development. If the Gross Regional Domestic Product (GDP) is insignificant, of course this will affect poverty. This insignificance can be seen through the growth rate in the rate of Gross Regional Domestic Product (GDP).

CONCLUSION

Based on the observation of data analysis in the study using the linear regression analysis method of panel data which has the goal of proving the influence on the independent variable consisting of the average length of schooling and the

Gross Regional Domestic Product (GDP) does not have an influence on the bound variable, namely the percentage of the poor population (Y). However, the level of labor force participation (X2) and the number of population (X3) have an influence on the bound variable, namely the percentage of the poor population (Y).

Observations stated that the independent variable, namely the level of labor force participation, had a significant negative effect on the percentage of poor people in East Nusa Tenggara Province. This is because the low labor force participation rate is certainly one of the causes of poverty. The contribution between the level of labor force participation in explaining the poverty variable. The existence of a level of labor force participation also explains the labor force

Observations stated that the independent variable, namely the number of populations, had a significant negative effect on the percentage of poor people in East Nusa Tenggara Province. The relationship is due to the surge in births will cause a family to experience the burden of costs and the deterioration of its economic condition into a burden of dependence.

REFERENCE

- Adella, Y., Program, S., Pembangunan, S. E., Ekonomi, F., & Bisnis, D. (2021). Pengaruh Upah Minimum Tingkat Pengangguran Terbuka dan Jumlah Penduduk Terhadap Kemiskinan di Provinsi Jawa Tengah. *Equilibrium : Jurnal Ilmiah Ekonomi, Manajemen Dan Akuntansi*, 10(2). <https://doi.org/10.35906/JE001.V10I2.785>
- Ariyanti, O. (2024). Pengaruh Tingkat Partisipasi Angkatan Kerja dan Pengangguran Terbuka Terhadap Tingkat Kemiskinan di Kabupaten Aceh Utara Periode 2017-2022. *Jurnal Tanbih*, 1(1), 14–29. <https://ejournal.staitangho.ac.id/index.php/jes/article/view/7>

- Ashari, R. T., & Athoillah, M. (2023a). Analisis Pengaruh Tingkat Pengangguran Terbuka, Tingkat Partisipasi Angkatan Kerja, Upah Minimum, Indeks Pembangunan Manusia, Pertumbuhan Ekonomi dan Jumlah Penduduk Terhadap Kemiskinan di Kawasan Tapal Kuda. *Journal of Development Economic and Social Studies*, 2(2), 313–326. <https://doi.org/10.21776/JDESS.2023.02.2.08>.
- Ashari, R. T., & Athoillah, M. (2023b). Analisis Pengaruh Tingkat Pengangguran Terbuka, Tingkat Partisipasi Angkatan Kerja, Upah Minimum, Indeks Pembangunan Manusia, Pertumbuhan Ekonomi dan Jumlah Penduduk Terhadap Kemiskinan di Kawasan Tapal Kuda. *Journal of Development Economic and Social Studies*, 2(2). <https://doi.org/10.21776/JDESS.2023.02.2.08>.
- Damanik, R. K., & Sidauruk, S. A. (2020). Pengaruh jumlah penduduk dan PDRB terhadap kemiskinan di Provinsi Sumatera Utara. *Jurnal Darma Agung*, 28(3), 358–368. <http://dx.doi.org/10.46930/ojsuda.v28i3.800>.
- Desmawan, D., Kanza Salsabila, A., Amalia, L., Amantha Anargya, R., & Sasi Kirana, R. (2023). Analisis Pengaruh Tingkat Partisipasi Angkatan Kerja dan Upah Minimum Provinsi Terhadap Kemiskinan di Provinsi Banten. *Jurnal Manajemen Akuntansi (JUMSI)*, 3(2), 649–657. <https://doi.org/10.36987/JUMSI.V3I2.4124>
- Fathurohman, F., Fitriana, D., Baharta, R., & Mukminah, N. (2022). Analisis Pengaruh Pertumbuhan Ekonomi dan Jumlah Penduduk Terhadap Kemiskinan. *Journal of Public Power*, 6(2), 104–112. <https://doi.org/10.32492/JPP.V6I1.6105>
- Firmansyah, A., & Khairunnisa, D. (2023). Dampak Pendidikan Terhadap Pengentasan Kemiskinan di Indonesia Dengan Menggunakan Analisis Data Panel. *Emerging Statistics and Data Science Journal*, 1(2), 227–237. <https://doi.org/10.20885/ESDS.VOL1.ISS.2.ART23>
- Hasanah, R., Syaparuddin, S., & Rosmeli, R. (2021). Pengaruh Angka Harapan Hidup, Rata-Rata Lama Sekolah dan Pengeluaran Perkapita Terhadap Tingkat Kemiskinan Pada Kabupaten/Kota di Provinsi Jambi. *E-Jurnal Perspektif Ekonomi Dan Pembangunan Daerah*, 10(3), 223–232. <https://doi.org/10.22437/PDPD.V10I3.16253>
- Jannah, M., & Sari, I. F. (2023). Analisis Pengaruh Rata-Rata Lama Sekolah, Angka Harapan Hidup dan Pengeluaran Perkapita Terhadap Kemiskinan Provinsi Nusa Tenggara Barat. *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi*, 3(1), 164–172. <https://doi.org/10.56799/EKOMA.V3I1.2108>
- Kevin, A. V., Bhinadi, A., & Syari'udin, A. (2022). Pengaruh PDRB, Angka Harapan Hidup, dan Rata Rata Lama Sekolah Terhadap Kemiskinan di Kabupaten/Kota Provinsi Jawa Tengah Tahun 2013-2021. *SIBATIK JOURNAL: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, Dan Pendidikan*, 1(12), 2959–2968. <https://doi.org/10.54443/SIBATIK.V11I12.482>
- Novriansyah, M. A. (2018). Pengaruh pengangguran dan kemiskinan terhadap pertumbuhan ekonomi di provinsi Gorontalo. *Gorontalo Development Review*, 1(1), 59–73. <https://doi.org/10.32662/golder.v1i1.115>.
- Nurhasanah, N., Safri, M., & Edi, J. K. (2019). Analisis pengaruh tingkat pendidikan dan pertumbuhan ekonomi terhadap tingkat kemiskinan di Provinsi Jambi. *E-Jurnal Ekonomi Sumberdaya Dan Lingkungan*, 8(3), 161–169. <https://doi.org/10.22437/jels.v8i3.11993>.

- Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022a). Pengertian Pendidikan. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 7911–7915. <https://doi.org/10.31004/JPDK.V4I6.9498>
- Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022b). Pengertian Pendidikan. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 7911–7915. <https://doi.org/10.31004/JPDK.V4I6.9498>
- Putriana, R., & Aji, R. H. S. (2022). Studi atas kemiskinan, tingkat partisipasi angkatan kerja, rata-rata lama sekolah sebagai penentu pertumbuhan ekonomi di Provinsi DI Yogyakarta. *Ekonomica Sharia: Jurnal Pemikiran Dan Pengembangan Ekonomi Syariah*, 8(1), 31–48. <https://doi.org/10.36908/esha.v8i1.481>.
- Ritonga, M., & Wulantika, T. (2020). Pengaruh PDRB dan Jumlah Penduduk Terhadap Tingkat Kemiskinan di Kabupaten Batu Bara Sumatera Utara (2010-2018). *Jurnal Diversita*, 6(1), 95–102. <https://doi.org/10.31289/DIVERSITA.V6I1.3135>
- Sembiring, F., Tarmizi, T., & Rujiman, R. (2020). Analisis Pengaruh Pertumbuhan Ekonomi, IPM, Pengangguran Terbuka dan Angkatan Kerja Terhadap Kemiskinan di Sumatera Utara. *Jurnal Serambi Engineering*, 5(2). <https://doi.org/10.32672/jse.v5i2.1925>.
- Shaleh, M., Mallongi, S., & Rahman, Z. (2021). Pengaruh Pengangguran, Indeks Pembangunan Manusia dan PDRB Terhadap Tingkat Kemiskinan di Kabupaten Luwu Timur. *Tata Kelola*, 8(2), 143–167. <https://doi.org/10.52103/JTK.V8I2.556>
- Suwito, S. (2020). *Pengantar Demografi* (1st ed.). Ediide Infografika.