# Analysis of Determinants of Poverty Levels in West Nusa Tenggara Province 2018-2023

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### **ABSTRACT**

Within the context of West Nusa Tenggara Province, the objective of this study is to analyse the impact that the human development index, economic growth, open unemployment rate, and gini ratio have on poverty in a manner that is both partial and simultaneous. Quantitative methods were utilised in the planning and execution of the project. Through the utilisation of a model that is founded on panel data regression, the data analysis technique is carried out. This research makes use of secondary data, specifically a mix of time series data spanning six years and a cross-section of ten districts and cities located within the province of West Nusa Tenggara. The total number of districts and cities included in this study is ten. According to the results of this study, the variables of the human development index and economic growth have a strong negative impact on poverty. This is indicated by the findings of the research. The open unemployment rate, on the other hand, has a substantial positive influence on poverty, whilst the gini ratio has a negative insignificant effect on poverty in West Nusa Tenggara Province throughout the period of 2018-2023. Both of these factors are considered to be important.

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# 1. INTRODUCTION

One of the most significant worldwide issues that is hurting countries all over the world, including Indonesia, is their level of poverty. According to information obtained from the Central Statistics Agency (BPS) in the year 2023, the number of persons living in poverty in Indonesia was 25.90 million out of a total population of 278,696.2 thousand people. Due to its negative impact on individual life and the economic development of a region, poverty is an

important indicator for measuring government performance and the success of economic development [1].

[2] stated that poverty is now a global problem and occurs in many countries, including Indonesia. Poverty is defined as a condition where people not only have low income levels, but also have limited access to basic needs, health services, education, and economic activities [3]. The government is trying to stop poverty in Indonesia as one of the main problems [4]. This is because if poverty is not addressed, Indonesia's

economic growth will be hampered [5]. The government builds a country with the aim of improving the standard of living of its people.

The reduction in poverty levels is one proof of the government's success in building a country [6].

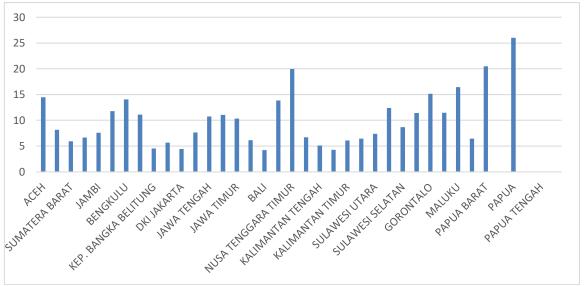


Figure 1. Poverty Data for 38 Provinces in Indonesia in 2023 Source: Central Bureau of Statistics of Indonesia

In addition, economic indicators such as the Human Development Index (HDI), Gross Regional Domestic Product (GRDP), Open Unemployment Rate (TPT), and Gini Ratio are thought to have a significant relationship with poverty levels in each province. Low HDI, dominance of economic sectors with low added value in GRDP, high

TPT, and inequality in income distribution reflected in the Gini Ratio can be determinant factors that worsen poverty, especially in disadvantaged areas.

The following data shows the number of poor people in districts or cities in West Nusa Tenggara province from 2018 to 2023.

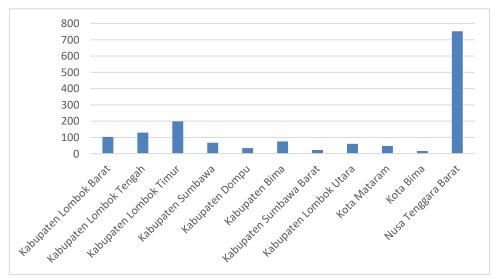


Figure 2. Number of Poor People in West Nusa Tenggara Province, 2023 Source: BPS West Nusa Tenggara Province 2023

A significant element that has a robust link with the poverty rate is the Human Development Index (HDI) metric. The primary factor in determining the quality of human resources is the assessment of educational attainment, healthcare services, and the aggregate income of the community within an autonomous territory. The size of the HDI also describes the quality of life of the community in a particular region. There is a kind of chain effect that can be caused by the

low HDI figure. Figure 1.3 presents data on the Human Development Index (HDI) per district/city in West Nusa Tenggara Province. According to research [7], which suggests that the HDI has a positive and significant association to poverty, this is the same as what is being explained here. On the other hand, this is not the same as the research [8] that found that the HDI had a large and negative impact on the poverty rate.

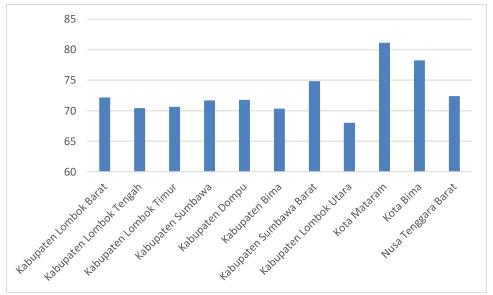


Figure 3. Human Development Index of Districts/Cities in West Nusa Tenggara Province in 2023

Source: Central Statistics Agency of West Nusa Tenggara Province 2023

The Human Development Index is not the only factor that has a role in eliminating poverty in a region; economic growth is also an important one. The rate of economic growth is a barometer that may be used to evaluate the success of development, and it is a prerequisite for lowering the levels of poverty. There is a shifting condition of economic growth in 2023, based on the gross domestic product (GDP) at constant prices in 2010. The state of the economy of West Nusa Tenggara is being affected by the slowdown in the global economy, which is the cause of this situation.

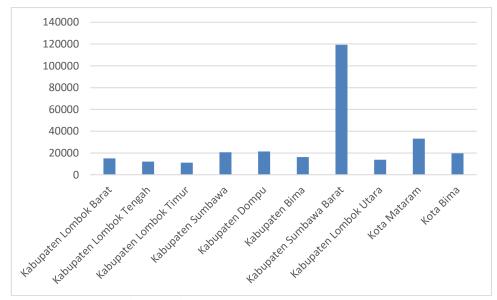


Figure 4. Economic Growth According to Constant 2010 Prices in West Nusa Tenggara in 2023

Source: Central Statistics Agency of West Nusa Tenggara Province 2023

The phrase economic growth pertains to the augmentation in the quantity of goods and services produced, as indicated by the Gross National Product (GNP) and Gross Regional Domestic Product (GRDP), whose values have risen relative to the preceding year [9].

The unemployment rate is another element that has a role in determining the poverty rate. As stated in [10], unemployment will have the consequence of lowering people's incomes, which will in turn bring about a reduction in the amount of prosperity that has been achieved. If the degree of

prosperity continues to decline, it will lead to an additional concern, which is poverty. If people have jobs and income, they can meet their living needs. When the needs of life are met, then they will not be in poverty. Therefore, a low unemployment rate (high employment opportunity rate) means that the poverty rate is also low [11].

Based on data from the Central Statistics Agency (BPS) of West Nusa Tenggara Province, in 2023. The following is data on the number of unemployed per district or city in West Nusa Tenggara Province.

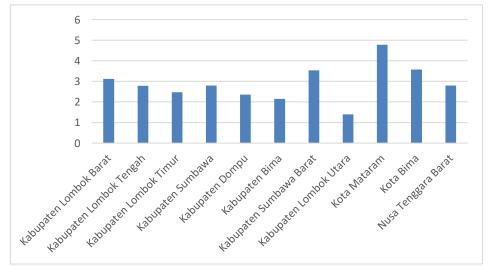


Figure 5. Number of Open Unemployment in West Nusa Tenggara Province in 2023 Source: Central Statistics Agency of West Nusa Tenggara Province 2023

BPS defines unemployment as people who do not have jobs but are preparing a business or are currently looking for work or have found work but have not started working or are desperate because they think they cannot get a job. The negative impact of unemployment is that it reduces an individual's income which will have an effect on reducing the individual's level of prosperity. The decline in an individual's

prosperity due to being unemployed will certainly increase their chances of being trapped [12].

The Gini ratio is yet another aspect that has an impact on the country's poverty rate. Based on the Lorenz curve, the Gini ratio is a tool that may be used to measure the degree of inequality that exists in the distribution of the population.

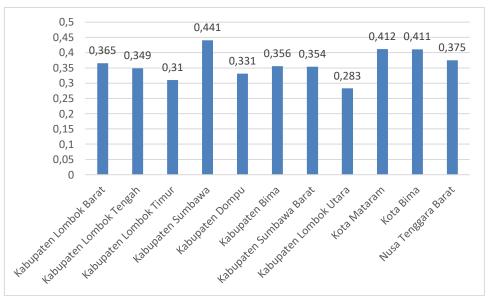


Figure 6. Gini Ratio in West Nusa Tenggara Province in 2023 Source: Central Statistics Agency of West Nusa Tenggara Province 2023

#### 2. LITERATURE REVIEW

#### 2.1 Human Development Index

The Human progress Index is a metric utilised to assess the quality of human progress. It is predicated on human physical conditions (health and welfare) as well as non-physical attributes (intellectualism). The advancement of physical conditions is influenced by aspects like life expectancy and purchasing power, whereas the progression of non-physical conditions can be assessed by the educational attainment individuals [13].

The Central Bureau of Statistics (BPS) states that the

Development Index Human (HDI) is a comparison metric encompassing life expectancy, literacy rate, education, and standard of living across all nations globally. According to [14] Human Development Index (HDI) is a strategic indicator that is often used to see the efforts and results of development programs in a region as a whole. this case. the human development index is taken as an example of the results development programs implemented several years earlier. Likewise, the progress of development programs can be measured over a certain period of time and reviewed by the human development index at the beginning and end of the period.

#### 2.2 Economic Growth

Different points of view on economic growth, which is a challenge that will persist for a long time. In its most basic form, economic growth can be defined as the process of economic development that occurs periodically and results in an increase in the actual income of a region. The augmentation of total income produced by a territory during a designated timeframe serves as the principal metric of economic growth. The economic growth rate is the percentage increase in real regional income for a given year compared to the previous year's real regional income. When calculating national income, the worth of the goods and services produced by a province is either determined in real terms or according to fixed prices. These prices are determined comparing them to prices in a certain year that are different from the year in which national production is computed. Economic growth pertains to an augmentation in gross regional domestic product (GRDP). This concept is applicable irrespective whether the increase surpasses or falls below the rate population growth, whether there are alterations in the economic structure. indicator of economic growth is rise in gross regional domestic product, which serves as a tool for assessing economic expansion [15].

According to [16] states that economic growth is a summary of economic performance during a certain period. Increasing the economic performance of society will affect the increase in the overall value of goods and services produced from all economic activities. So that with the increase in these activities will be followed by increased income and welfare of society which will ultimately reduce poverty.

## 2.3 Unemployment

The Central Bureau of Statistics defines unemployment as comprising individuals who are actively seeking employment, those who have ceased searching due to the belief that job acquisition is unattainable, and individuals who are employed but have not commenced work.

[17] unemployment is an individual who is grouped in the active workforce who is looking for work, but has not yet found work. Meanwhile, according to [18] Unemployment is the inability of the workforce to obtain work according to what they need or want.

According to Keynes' Theory, unemployment problem occurs due to low aggregate demand so that the hampered economic growth is not caused by low production, but rather by consumption. According Keynes, this can be attributed to the free market mechanism. When the workforce increases, wages will fall. This will result in losses, because a decrease in wages means a decrease in people's purchasing power for goods or services, resulting in producers experiencing losses and not being able to absorb labor [19]

An open unemployment workforce is one that does not

have any jobs available to them any time. Frictional unemployment, structural unemployment, and conjunctural unemployment are the three categories that are used typically to classify unemployment. These categories are chosen according to factors that lead to unemployment.

#### 2.4 Gini Ratio

The Gini coefficient or ratio is a metric that may be used to measure the degree of inequality that exists in the distribution of the population. The Gini ratio is a measure of income distribution that is determined based on income classes in ten different income classes, as stated by the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per.25/MEN/IX/2009 about the Level of Transmigration Settlement Development information. The Gini coefficient can be anywhere between 0 and 1, with the rule of thumb being that the closer it is to 0 the more equitable the distribution of income is. On the other hand, if the Gini coefficient is closer to 1, it indicates that the level of inequality or unevenness higher [20].

The Gini ratio is important for a region because it can represent the condition of the community in that region. The higher the Gini ratio in a region indicates that the distribution of income in that region is very uneven and the distance between the rich and the poor is very far [21].

#### 2.5 Poverty

One of the most common definitions of poverty is a state in which an individual or group

does not possess the financial fulfill their resources to day-to-day fundamental requirements. It is possible to determine whether an individual or group is living in absolute poverty by determining whether or not they are unable to meet the very crucial basic necessities that are necessary for survival and work. These needs include food, clothes, health care, shelter, and education [22].

[17] Poverty is often a major problem in several countries. Developing countries have large populations, so they can social inequality in society. Poor people do not only live with low incomes, but also struggle with limited access to health and education services, and may face injustice and vulnerable to the threat of criminal acts.

First, on a more local scale, poverty is caused by unequal allocation of resources, which leads to an imbalance in the distribution of income. This is the foundation upon which poverty is built. Those who are poor have little resources, and the quality of those resources is poor. A second reason for the existence of poverty is that there are disparities in the quality of human resources. The lack of high-quality human resources leads to low levels of production, which in turn leads to decreasing levels of income. A lack of unfortunate education, circumstances, discrimination, inherited traits are potential factors that can have an impact on the quality of these human resources. Third, disparities in access to capital are a contributing factor in the existence of poverty. As stated in [23], poverty can be attributed to a number of different issues, including but not limited to a lack of education, a lack of motivation to work, limited natural resources, restricted employment prospects, limited capital, and the obligations placed on families.

### 3. METHODS

Among the quantitative research that is covered in this research is this research. The sample for this study consisted of ten districts or cities located within the West Nusa Tenggara Province. The observation period for this study lasted for a period of six years, from 2017 to 2023. As a result, there were sixty samples included in this study.

This study employed quantitative data sourced from secondary sources. This study encompasses statistics on the Human Development Index, economic growth, open unemployment rate, and Gini coefficient for districts and cities in the province of West Nusa Tenggara. The data for this research is sourced from the BPS of West Nusa Tenggara Province.

For the purpose of producing processed data, panel data regression analysis, model selection tests (chow test, hausman test, lagrange multiplier test), classical assumption tests (multicollinearity test, heteroscedasticity test, normality test, autocorrelation test), and hypothesis testing (t-test, f-test, and coefficient of determination test), the research data were analyzed within

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects the context of E-views 12, which is a statistical software program.

The form of the econometric model can be written as follows:

$$Y_{it} = \beta_0 + \beta_1 x 1_{it} + \beta_2 x 2_{it} + \beta_3 x 3_{it} + \beta_4 x 4_{it} + \varepsilon_{it}$$

Where:

Y = Poverty in Districts/Cities of NTB Province

B0 = Constant

β1β2 β3β4 = Independent variable coefficient

X1 = Human Development Index of NTB Province Regency/City

X2 = Economic Growth of Districts/Cities in NTB Province

X3 = Open Unemployment Rate of Regency/City of NTB Province

X4 = Gini Ratio of Regency/City of NTB Province

 $\varepsilon$  = Error coefficient

#### 4. RESULTS AND DISCUSSION

Based on the results of data processing conducted by the author on the variables that affect the welfare of the community in West Nusa Tenggara Province. Here are some tests conducted by the author, as follows:

#### 4.1 Model Test

#### a. Chow Test

The Chow test is conducted to determine the selected model between the Common Effect Model (CEM) or the Fixed Effect Model (FEM).

Effects Test	Statistic	d.f.	Prob.
Cross-section F Cross-section Chi-square	2305.386586 366.828085	(9,46) 9	0.0000

Figure 1. Chow Test Results
Source: Secondary Data Processed by E-views 12

Based on the table above, it can be seen that the results of the chow test are the cross-section probability value F < 0.05 or

0.0005 < 0.05, which means that in this chow test the selected model is the fixed effect model.

#### b. Hausman test

The Hausman test is used to determine the appropriate panel model between Fixed Effect and Random Effect.

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	66.484489	4	0.0000

Figure 2. Hausman Test Results

Source: Secondary Data Processed by E-views 12

effect.

Based on the table above, it can be seen that the results of the Hausman test are a probability value <0.05 or 0.0000 <0.05, which means that in this Hausman test the selected model is the fixed effect model.

c. Lagrange Multiplier (LM) Test This test is used to determine whether the random effect is better than the common

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided

(all others) alternatives

	Test Hypothesis			
	Cross-section	Time	Both	
Breusch-Pagan	78.43805 (0.0000)	1.589286 (0.2074)	80.02734 (0.0000)	

Figure 3. LM Test Results

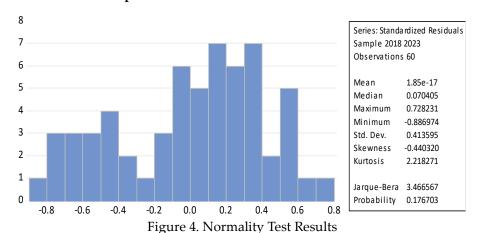
 $Source: Secondary\ Data\ Processed\ by\ E-views\ 12$ 

Based on the table above, it can be seen that the results of the LM test are the Breusch-Pagan value <0.05 or 0.0000 <0.05, which means that in this LM test the selected model is the random effect model.

#### 1. Normality Test

The Jarque-Bera probability is a useful tool for determining whether or not the data distribution is normal. The normality test is used to determine whether or not the data distribution is normal.

#### 4.2 Classical Assumption Test



Source: Secondary Data Processed by E-views 12

Based on the results of the normality test above, it shows that the Jarque-Bera prob. value is 3.466567 > 0.05. This means that the residual value is normally distributed.

#### 2. Multicollinearity Test

Multicollinearity test is a perfect linear relationship between independent variables in regression. This can be measured from the correlation coefficient between independent variables, and if the value is > 0.80, multicollinearity occurs.

	HDI	PDRB	PENGANG	RATIO
HDI	1.000000	0.298743	0.631638	0.535312
PDRB	0.298743	1.000000	0.418649	0.073263
PENG	0.631638	0.418649	1.000000	0.414804
RATIO	0.535312	0.073263	0.414804	1.000000
Figure 5. Multicholinearity Test Results				

Source: Secondary Data Processed by E-views 12

From the table presented above, it is evident that the results of the multicollinearity test can be observed from the correlation coefficient value. It is worth noting that every variable has a coefficient value that is less than 0.80, which leads to the conclusion that this model does not encounter any issues related to multicollinearity.

Dependent Variable: ABS(RESID) Method: Panel Least Squares Date: 11/18/24 Time: 23:58 Sample: 2018 2023

Periods included: 6
Cross-sections included: 10

Total panel (balanced) observations: 60

#### 3. Heteroscedasticity Test

Heteroscedasticity test occurs when the error variance varies. Glejser's test is used to detect it, with a probability > 0.05 indicating no heteroscedasticity.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C LOG(HDI)	0.104894 -0.185195	0.923436 0.191658	0.113591 -0.966277	0.9101 0.3390
LOG(PDRB)	0.068696	0.054458	1.261437	0.2135
PENGANGGURAN LOG(RATIO)	0.007691 -0.008268	0.005441 0.044694	1.413553 -0.184994	0.1642 0.8540

Effects Specification				
Cross-section fixed (dummy variables)				
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.242591 0.028540 0.028753 0.038031 135.7746 1.133334 0.357382	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat	0.033536 0.029173 -4.059153 -3.570473 -3.868003 2.471668	

Figure 6. Heteroscedastic Test Results Source: Secondary Data Processed by E-views 12

As can be seen in Figure 6, the chisquare probability value of Obs R-Squared is higher than 0.05. This is something that may be observed. Therefore, it is possible to draw the conclusion that this model does not contain any heteroscedasticity.

#### 4. Autocorrelation Test

The autocorrelation test is a method for detecting the presence or absence of a

relationship between residuals in a regression model at various times.

#### Effects Specification

Period fixed (dummy variables)					
R-squared	0.703432	Mean dependent var	4.037131		
Adjusted R-squared	0.650049	S.D. dependent var	0.759473		
S.E. of regression	0.449279	Akaike info criterion	1.388665		
Sum squared resid	10.09257	Schwarz criterion	1.737723		
Log likelihood	-31.65995	Hannan-Quinn criter.	1.525201		
F-statistic	13.17725	Durbin-Watson stat	0.641574		
Prob(F-statistic)	0.000000				

Figure 7. Results Of Autocorrelated Test Source: Secondary Data Processed by E-views 12

Based on the image above, the results of the Durbin Watson autocorrelation test are 0.641. This value is below 2, which indicates the potential for positive autocorrelation in the regression model used.

According to [24] autocorrelation test is not required because autocorrelation test

only occurs in time series data. Meanwhile, in this study using panel data. Thus, autocorrelation test in this study was not carried out.

#### 4.3 Hypothesis Testing

Dependent Variable: LOG(KEMISKINAN)

Method: Panel Least Squares Date: 11/18/24 Time: 23:36

Sample: 2018 2023 Periods included: 6

Cross-sections included: 10

Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	50.22969	6.780084	7.408417	0.0000
LOG(HDI)	-9.588336	1.594078	-6.014971	0.0000
LOG(PDRB)	-0.760976	0.112751	-6.749197	0.0000
PENGANGGURAN	0.395915	0.077057	5.137920	0.0000
LOG(RATIO)	-0.725120	0.607143	-1.194314	0.2380

Effects Specification				
Period fixed (dummy variables)				
R-squared	0.703432	Mean dependent var	4.037131	
Adjusted R-squared	0.650049	S.D. dependent var	0.759473	
S.E. of regression	0.449279	Akaike info criterion	1.388665	
Sum squared resid	10.09257	Schwarz criterion	1.737723	
Log likelihood	-31.65995	Hannan-Quinn criter.	1.525201	
F-statistic	13.17725	Durbin-Watson stat	0.641574	
Prob(F-statistic)	0.000000			

Figure 8. Hypothesis Test Results
Source: Secondary Data Processed by E-views 12

#### 1. T-test

The t-statistic test is a statistical technique employed to assess the degree to which a singular independent variable accounts for the variation in a dependent variable. The aforementioned table of the

fixed effect model can be utilised to provide the results of the t-test. This hypothesis test aims to determine the influence of the human development index, economic growth, open unemployment rate, and district/city Gini ratio on the poverty rate in districts and cities of West Nusa Tenggara Province. The results of the data processing carried out by the researcher are as follows:

> Testing for the Human Development Index

In the Human Development Index variable, the t-statistic is -6.014971. While the probability value is 0.0000 <0.05, which Human means that this Development Index variable has a significant influence on poverty in West Nusa Tenggara Province. Every 1% increase in the Human Development Index will by decrease poverty 9,588,336,000 people.

b. Testing for human growth

Testing on the human growth variable has a t-statistic of -6.749197. while the probability value is 0.0000 <0.05, which means that this human growth variable has a significant influence on poverty in West Nusa Tenggara Province. Every increase in economic growth of Rp. 1,000,000, poverty will decrease by 760,976,000 people.

 Testing for Open Unemployment Rate

A t-statistic of 5.137920 was found when examination was performed on the variable Open Unemployment Rate. indicates that the variable Open Unemployment Rate does not have a substantial impact on poverty in West Nusa Tenggara Province, as indicated by the probability value of 0.0000, which is less than the threshold 0.05. The number individuals living in poverty will fall by 395,915,000 for every one percent increase in the Open Unemployment Rate.

d. Testing for gini ratio

Testing on the gini ratio variable has a t-statistic of -1.194314. While the probability value is 0.2380 > 0.05, meaning that this gini ratio variable has an insignificant effect on poverty in West Nusa Tenggara Province. Every 1% increase in the gini ratio will decrease poverty by 725,120,000 people.

#### 2. F Test

The F statistical test fundamentally assesses whether all independent variables in the model simultaneously affect the dependent variable. The F test findings are presented in the table above, headed "Fixed Effect Model."

The calculation results for the fixed effect model yielded a F probability value of 0.000000, which is below the alpha criterion of 0.05 (0.000000<0.05). Consequently, it can be inferred that the human development index, economic growth, open unemployment rate, and Gini coefficient jointly exert a substantial influence on the poverty rate.

3. Coefficient of Determination Test The coefficient of determination, or R2, can be used to ascertain the extent of variation in the dependent variable that is attributable to the independent variable. The dependent variable in this study is the Poverty Level (Y), whereas the independent variables comprise the Human Development Index (X1), Economic Growth (X2), Open Unemployment Rate (X3), and the Gini Coefficient (X4). The explanation for this phenomenon is provided by the relationship between the two variables. According to the fixed effect estimate model, the coefficient of determination (R2) is 0.650049. This indicates that the human development index variable, unemployment, and minimum wage can explain 65.00% of the variance in the poverty level variable. The remaining 35% of the variation can be explained by other factors that are not included in the model.

#### Discussion

# 1. Analysis of the Influence of the Human Development Index (HDI) on Poverty in NTB Province

The regression analysis of the Human Development Index yielded a coefficient of -9.588336 and a probability value of 0.0000, which is less than 0.05. These data elucidate that any decline in the Human Development Index will result in an escalation of poverty. This indicates that a 1% improvement in the Human Development Index will result in a decrease of 9,588,336,000 individuals living in poverty. The Human Development Index significantly adversely affects the poverty level in West Nusa Tenggara province. It can be inferred that the poverty rate diminishes in correlation with the rising Human Development Index.

The results of this study align with those of [25], who discovered that increasing the HDI contributes to a reduction in poverty rates by improving the quality of human resources and workforce competitiveness. The results of this investigation concur with those findings. However, these results differ from the research of [8], which found that the HDI did not have a significant effect on poverty. This may be caused by other factors such as low labor absorption of education graduates or unequal access to basic services in certain areas. This indicates that policies to increase the HDI, such as investment in education and more equitable health services, can be an effective strategy in reducing poverty rates in NTB.

# 2. Analysis of the Impact of Economic Growth on Poverty in NTB Province

Based on the results of the economic growth regression, a coefficient value of -0.760976 and a probability value of 0.0000 <0.05 were obtained, which explains that every decrease in economic growth will increase poverty, meaning that every increase in economic growth of Rp 1,000,000 will decrease poverty by 760,976,000 people. The economic growth exerts a negative and

significant impact on poverty in West Nusa Tenggara Province, indicating that increased economic growth correlates with a reduced poverty rate.

The findings of this study are in line with the findings of [26] research, which asserts that economic growth has a negative association with poverty. According to Purnama's findings, a steady increase in economic activity can lead to a reduction in the number of individuals living in poverty. The research conducted by [27], on the other hand, demonstrates that economic growth does not have a significant impact on poverty. This is because poverty can be generated by disparity in the distribution of the benefits of economic growth or by the dominant economic sector failing to create sufficient employment opportunities for the majority of the population. This confirms that more equitable economic growth based productive sectors such as industry and services can be a more effective solution in reducing poverty in NTB, compared to only relying on the agricultural sector which is vulnerable to market and weather fluctuations.

# 3. Analysis of the Influence of Open Unemployment Rate on Poverty in NTB Province

The results of the regression analysis on the open unemployment rate indicate that the coefficient value is 0.395915, and the probability value is 0.0000, which is less than the threshold of 0.05. This indicates that every increase in the open unemployment rate will lead to an increase in poverty. Specifically, for every 1% increase in the open unemployment rate, there will be a decrease of 395,915,000 people within the poverty category. The open unemployment rate exerts a positive and considerable influence on poverty in West Nusa Tenggara Province, indicating that the poverty rate is directly proportionate to the jobless rate. This indicates that an increase in the unemployment rate correlates with an increase in the poverty rate.

The findings of this study align with [28] research, which identified a positive and

significant correlation between unemployment and poverty, as the scarcity of job prospects impedes individuals from enhancing their standard of living. However, this finding contradicts [29] research, which states that unemployment does not have a significant effect on poverty. This may be due to other factors such as the informal sector which is quite large in absorbing labor, so that unemployment recorded in statistics does not fully reflect the actual economic conditions. These results also indicate that policies to increase employment opportunities, both through investment in labor-intensive sectors strengthening local-based entrepreneurship, are very much needed to overcome the problem of poverty in NTB.

# 4. Analysis of the Influence of the Gini Ratio on Poverty in NTB Province

Based on the results of the Gini ratio regression, a coefficient value of -0.725120 and a probability value of 0.2380 <0.05 were obtained, which explains that every decrease in the Gini ratio will reduce poverty, meaning that every increase in the Gini ratio by 1% will reduce poverty by 725,120,000 people. Therefore, the Gini ratio has a negative and minor effect on poverty in West Nusa Tenggara Province. This indicates that the poverty rate is proportional to the degree to which income inequality is greater.

The results of this study are inconsistent with the research of [30], which found that the Gini ratio had a significant positive effect on poverty in Indonesia, indicating that unequal income distribution worsens the conditions of the poor. These results are also supported by research by [31], which states that the Gini ratio has a significant effect on poverty in six provinces in Indonesia. This study shows that income redistribution policies, such as increasing access to education and health for the poor, as well as more inclusive economic policies, are very important in reducing poverty rates in NTB.

# 5. The Influence of Human Development Index, Economic Growth, Open Unemployment Rate, Gini Ratio on Poverty in West Nusa Tenggara Province

Using the results of a simultaneous test that involved the regression of the Human Development Index, Economic Growth, Open Unemployment Rate, and Gini Ratio, a probability value (F-statistic) of 0.000000 was produced. This value was considered to be statistically significant. Based on the criteria of the F-test, if the value of 0.000000 is less than 0.05, it indicates that the variables such as the Human Development Index, Economic Growth, Open Unemployment Rate, and Gini Ratio have a simultaneous or joint influence on poverty in West Nusa Tenggara Province. Moreover, these findings are in agreement with the hypothesis that has been submitted for consideration.

The outcomes of this analysis align with the results of the study conducted by [32]. The study's findings, derived from panel data regression, indicated that the rates of open unemployment, economic growth, and the Human Development Index significantly influenced poverty levels in North Sumatra Province from 2017 to 2021. On the other hand, [33] carried out the research that is in agreement with this study. The findings of this research highlighted the fact that the rate of poverty in Indonesia during the period of 2017-2022 was significantly impacted by economic growth, the Gini ratio, and the Development Human Index, either simultaneously or in combination with one another.

#### 5. CONCLUSION

Based on the results of the analysis that has been carried out regarding "Analysis of Determinants of Poverty Levels in West Nusa Tenggara Province 2018-2023", several things can be concluded as follows:

 a. Poverty is significantly and negatively impacted by the Human Development Index (HDI), which means that the

- greater the HDI, the lower the poverty rate. This is a major and negative relationship. The results of this study demonstrate that enhancing the standard of education, health care, and the purchasing power of individuals can help to the reduction of poverty rates in NTB.
- b. Economic growth has a negative effect on poverty rates, meaning that the higher the economic growth, the lower the poverty rate. However, uneven economic growth can limit its impact on poverty alleviation, especially if the growing economic sectors do not absorb much poor labor.
- c. It may be stated that the Open Unemployment Rate (TPT) has a positive impact on poverty. This implies that the higher the unemployment rate, the higher

- the poverty rate will be. This shows that the creation of quality jobs is very necessary to reduce unemployment and improve people's welfare.
- d. The Gini ratio has a positive and significant effect on poverty, indicating that the higher the inequality in income distribution, the higher the poverty rate. This inequality is the main factor that hinders poverty reduction in NTB.

Thus, it can be concluded that the HDI, economic growth, open unemployment rate, and Gini ratio are the main factors that determine the poverty rate in NTB. Therefore, policies that focus on improving the quality of human resources, inclusive economic growth, job creation, and equitable distribution of income need to be a priority in poverty alleviation efforts in this area.

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