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THE EFFECT OF GNP, EDUCATION AND UNEMPLOYMENT ON POVERTY IN DISTRICTS/MUNICIPALITIES OF WEST NUSA TENGGARA IN 2009-2013.

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ABSTRACT

This study aims to analyze partially and jointly the effect of Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara districts/cities and analyze which variables have a positive influence on poverty in West Nusa Tenggara districts/cities. This research is a type of causal research with panel data regression analysis techniques for 10 districts/cities in West Nusa Tenggara Province. The data source is secondary data in the form of time series data during the period 2009-2013. The dependent variable in this study is poverty, Gross Regional Domestic Product, education and unemployment as independent variables. The results showed that Gross Regional Domestic Product and education had no significant and negative effect on poverty while the unemployment variable had a significant and negative effect on poverty. Simultaneously, the three observed variables have a significant and negative effect on poverty. Of the variables studied, the unemployment variable has a dominant influence on poverty while the variable that has the least influence on poverty is the Gross Regional Domestic Product variable.

Keywords: Gross Regional Domestic Product, education, unemployment and poverty

INTRODUCTION

Economic development is one of the interesting things because it consists of many dynamics, both micro and macro. Development always has a positive impact and a negative impact, therefore indicators are needed as a benchmark for development. A region will be said to be successful in economic development if it solves three problems in development. The three problems are the number of poverty that continues to increase, the worsening distribution of income and employment that is not varied so that it is unable to absorb job seekers (Nurfauziah 2017: 1).

Planning has a very important role in the development process. One of the roles of planning is as a direction for the development process to run towards the goals to be achieved as well as a benchmark for the success of the development process carried out. Meanwhile, development itself can be interpreted as an effort made to increase the growth of Gross Domestic Product at the national level or gross regional domestic product at the regional level (Ravi Dwi Wijayanto 2010: 1).

Both central and regional governments have made efforts to implement various policies and programs to reduce poverty, but they are still far from the main problem. The policies and programs that have been implemented have not shown optimal results. There is still a gap between the plan and the achievement of goals because poverty reduction policies and programs are more oriented towards sectoral programs. Therefore, an integrated, integrated and synergistic poverty reduction strategy is needed so that it can solve the problem completely (Ravi Dwi Wijayanto 2010:18).

The term poverty arises when a person or group of people is unable to meet the level of economic prosperity that is considered the minimum needs of a certain standard of living. In a popular sense, poverty is understood as a state of lack of money and goods to ensure survival. According to the World Bank in Amalia (2016: 81) one of the causes of poverty is due to a lack of income and assets to meet basic needs such as food, clothing, housing and the level of health and education received.

In addition, poverty is also related to limited employment opportunities, and usually those categorized as *poor* do not have jobs (unemployment) and their level of education and health is generally inadequate. Addressing the problem of poverty cannot be done in isolation from the problems of unemployment, education, health and other issues that are explicitly linked to the problem of poverty. In other words, the approach must be carried out across sectors, across actors in an integrated and coordinated and integrated manner (Afrilianti 2016:81).

Poverty is indeed a complex issue because it is not only related to the problem of low levels of income and consumption but also related to low levels of education, health and helplessness to participate in development and various problems related to human development. These dimensions of poverty are manifested in the form of lack of nutrition, water, healthy housing, poor health care and low levels of education (Nurfauziah 2017:2).

Information on the poverty profile is needed by policy makers. Information on the types of problems and the root causes faced by various segments of the poor can help program planning in determining appropriate programs. By knowing the poverty profile, policy makers can focus more on poverty alleviation programs so that they can better suit the needs of the poor. The first step to identifying the poverty profile is to first establish a definition of poverty, which has various meanings.

The World Bank defines poverty as a state of not achieving a decent life with an income of USD 1.00 per day, in low-income countries. While in developed countries the poor limit is USD 14.00 per day, and moderate income countries USD 2.00 per day. Meanwhile, the United Nations Development Program (UNDP) defines poverty as hunger, lack of shelter, inability to see a doctor if sick, inability to get clean water, powerlessness, lack of representation and freedom. Furthermore, if you follow the Central Bureau of Statistics, poverty is a condition of a person who can only fulfill his food less than 1,200 calories per capita a day (Arief Daryanto 2012: 207).

The results of poverty reduction efforts in West Nusa Tenggara Province show a positive effect. This can be seen from the declining poverty rate. Table 1.1 shows the downward trend of the poverty rate in West Nusa Tenggara for the period 2007-2013. In 2007, the poverty rate in West Nusa Tenggara Province was 24.99 percent and then decreased to 17.97 percent in 2013

Table 1.1 Poverty percentage in West Nusa Tenggara Province 2007-2013

No.	Year	Percentage
1	2007	24,99
2	2008	23,81
3	2009	22,78
4	2010	21,55
5	2011	19,73
6	2012	18,63
7	2013	17,97

Source: BPS NTB 2018

Economic growth is the key to reducing poverty in a region. Meanwhile, Gross Regional Domestic Product is one of the indicators of economic growth in a region. Gross regional domestic product at constant prices is used to show the overall rate of economic growth from year to year so that the direction of the regional economy will be clearer.

Apart from economic growth, poverty alleviation can be seen from the formation of human resources through education which will have an impact on increasing one's productivity level. This is because education involves character building and at the same time maintains the human identity of a nation. Many poor people experience ignorance so it is important to understand that poverty can lead to ignorance and ignorance is clearly synonymous with poverty (Nurfauziah 2017: 5). To break the causal chain, there is one key element, namely education. Because education is a means of eradicating ignorance as well as poverty. One of the indicators used to measure development programs in the field of education is the level of literacy in a region.

In addition, efforts to reduce the unemployment rate and reduce the poverty rate are equally important. According to Sukirno in Nurfauziah (2017: 6) unemployment

will have the effect of reducing people's income and it will reduce the level of prosperity that has been achieved. The decline in the level of prosperity will lead to another problem, namely the problem of poverty.

Based on the background of the above problems in West Nusa Tenggara Province in the period 2009-2013 there was a decrease in the poverty rate but the average poverty rate of West Nusa Tenggara Province was still relatively high when compared to other provinces in Indonesia. Therefore, this research is important to determine the factors that influence poverty in West Nusa Tenggara Province. This study seeks to describe the effect of Gross Regional Domestic Product, education level and unemployment on poverty in districts/cities in West Nusa Tenggara Province.

B. THEORETICAL FOUNDATION

1. Povert

Poverty is a situation where there is a lack of ordinary things to have such as food, clothing, shelter and drinking water, these things are closely related to the quality of life. Poverty can also mean a lack of access to education and employment that would enable one to overcome poverty and gain proper respect as a citizen.

According to Subandi, (2012:30) a person is said to be poor if they experience "*capability deprivation*" where the person experiences a lack of substantive freedom. According to Bloom and Canning, this substantive freedom has two sides: opportunity and security. Opportunity requires education and security requires health.

From this definition, it is understood that poverty is a condition in which a person cannot enjoy all kinds of choices and opportunities in fulfilling his basic needs, such as not being able to fulfill health, decent living standards, freedom, self-respect, and a sense of being respected like other people.

2. Economic Growth

According to Todaro, (2006: 12) economic growth is an increase in the long-term capacity of the country concerned to provide various economic goods to its population. The increase in capacity itself is determined by technological, institutional, and ideological progress or adjustments to the various demands of the existing situation. This makes economic growth characterized by 3 main things, among others:

1. Per capita growth rate in real terms.
2. The spread or distribution of the labor force according to the sector of production activity that is the source of their livelihood.
3. Population distribution pattern.

Todaro (2006: 12) states that economic growth is one of the processes of increasing output per capita in the long term where the emphasis is on 3 aspects, including:

1. Process, i.e. economic growth is not a picture of an economy that looks at how an economy develops or changes over time.
2. Output per capita, which is economic growth associated with an increase in output per capita in this case there are two important elements such as total output and population.
3. Timeframe, i.e. an increase in output per capita for 1-2 years followed by a decrease in output per capita does not constitute economic growth. It is said to grow if over a long period of time (5 years or more) there is an increase in output per capita.

According to Todaro (2006:13) until the end of the 1960s, economists believed that the best way to catch up with economic backwardness was to increase the rate of economic growth as high as possible so that it could exceed the rate of population growth. In this way, the per capita income figure would increase so that there would automatically be an increase in the prosperity of the community and would ultimately reduce the number of poor people. As a result, the main target in economic development is more emphasized on efforts to achieve a high rate of economic growth. However, development carried out in developing countries often experiences a dilemma between

growth and equity. Economic development requires higher national income and for this reason a higher growth rate is an option that must be taken. However, the problem is not only about how to spur growth, but also who carries out and has the right to enjoy the results.

3. Education

Almost no one disputes that education is the pioneer in the development of a nation's future. If the education world of a nation is damaged, then the destruction of the nation is only a matter of time. This is because education involves character building and at the same time maintaining the human identity of a nation. So, every nation that wants to progress, the development of education is always a top priority.

Many poor people suffer from ignorance or experience ignorance even systematically. Therefore, it is important for us to understand that poverty can lead to ignorance, and ignorance is clearly synonymous with poverty. To break the causal chain above, there is one key element, namely education. Because education is a means of eradicating ignorance as well as poverty.

4. Unemploymen

In the internationally determined standard of understanding, what is meant by unemployment is a person who has been classified in the labor force who is actively looking for a job at a certain wage level, but cannot obtain the job he wants. Therefore, according to Sukirno (2000:23), unemployment is usually divided into three types based on the circumstances that cause it, including:

1. Frictional unemployment, which is unemployment caused by the action of a worker to leave his/her job and look for a better job or in accordance with his/her wishes.
2. Structural unemployment, which is unemployment caused by structural changes in the economy.
3. Conjuncture unemployment, which is unemployment caused by natural overemployment and occurs as a result of a reduction in aggregate demand.

According to Lincolin (1997:30) the forms of unemployment are:

1. *Open unemployment* refers to those who are able and often eager to work but there are no suitable jobs available for them.
2. *Underemployment*, are those who are nominally fully employed but whose productivity is so low that a reduction in hours worked has no bearing on overall production.
3. *Impaired* workers, are those who may work fully but with weak intensity due to malnutrition or illness.
4. Unproductive workers are those who are able to work productively but cannot produce something good.

According to Tambunan (2001:50), unemployment can affect the poverty rate in various ways, including:

1. If households are liquidity constrained, which means that current consumption is strongly influenced by current income, then the unemployment disaster will directly affect the *income poverty rate* by the *consumption poverty rate*.
2. If households do not face liquidity constraints, which means that current consumption is less affected by current income, then an increase in unemployment will lead to an increase in poverty in the long run, but less so in the short run.

RESEARCH METHODS

RESEARCH VARIABLES

1. Dependent Variable

   The dependent variable in the study is poverty in West Nusa Tenggara Province by district/city in 2009-2013.

2. Independent Variable

   The independent variables in this research are Gross Regional Domestic Product , education and unemployment in 2009-2013.

DATA COLLECTION METHOD

Arikunto (2002: 40) states that the data collection method is a systematic and standard procedure for obtaining quantitative data, besides that the data collection method has a technical function to enable researchers to collect data in such a way that numbers can be given to the object under study.

The data used to achieve the objectives in this research is fully obtained through literature study as the data collection method, so there is no need for sampling techniques and questionnaires. The period of data to be used in this research is 2009-2013. As support, reference books, journals, newspapers related to poverty issues are used.

ANALYSIS METHOD

1. Panel Data Analysis Method

The function model that will be used to determine poverty in West Nusa Tenggara is:

$$Y = f(X_1, X_2, X_{(3)})$$

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{(2it)} + \beta_3 X_{(3it)} + U_{(it}$$

Where:

Y = Percentage of poverty in

X_1 = Gross Regional Domestic Product rate in real prices in

X_2 = Education or literacy rate in

X_3 = Unemployment in

I = *cross*

T = *time series*

β_0 =

β_1, β_2, β_3=

U = error

HYPOTHESIS TEST

a. Individual Test (t Test)

The individual test is conducted to see the significance of the influence of the independent variable on the independent variable individually and assume other variables are constant. The hypothesis used:

1. H_0:b_1 = 0 there is no effect between the Gross Regional Domestic Product variable and poverty.

   H_1:b_1 < 0 there is a negative effect between the Gross Regional Domestic Product variable and poverty.
2. H_0:b_2 = 0 there is no effect between the literacy variable and poverty.

   H_1:b_2 < 0 there is a negative effect between the literacy variable and poverty.
3. H_0:b_3 = 0 there is no effect between the variable unemployment rate and poverty.

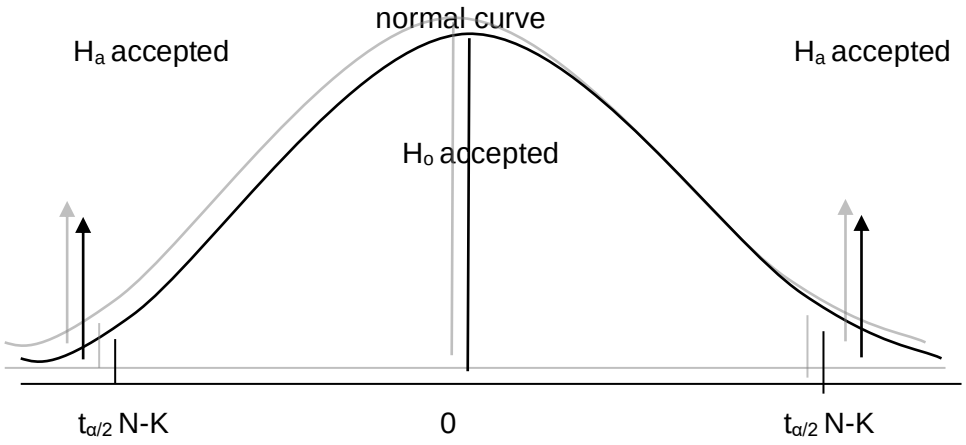
   H_1:b_3 > 0 There is a positive influence between the unemployment rate variable and poverty.

At a significance level of 5 percent, the test used is as follows:

a. If t-count > t-table then H_0 is rejected, meaning that one of the independent variables significantly affects the dependent variable.

b. If t-count < t-table then H_0 is accepted, meaning that one of the independent variables does not significantly affect the dependent variable.

Figure 3.



b. Simultaneous Test (F Test)

The F test basically shows whether all the independent variables included in the model have a joint influence on the dependent variable. The hypothesis used:

1. H_0: $b_1,b_2,b_3 = 0$ all independent variables are not able to influence the dependent variable
2. H_1: $b_1,b_2,b_{(3)} \neq 0$ all dependent variables are able to influence the dependent variable jointly

At a significance level of 5 percent with the test criteria used as follows:

a. H_0 is accepted and H_1 is rejected if F count < F table, which means that the explanatory variables together do not significantly affect the explained variable.

b. H_0 is rejected and H_1 is accepted if F count > F table, which means that the explanatory variables jointly affect the explained variable significantly.

c. Test Coefficient of Determination (R^2)

Imam Ghozali (2002) states that the coefficient of determination (R^2) essentially measures how far the ability of a model to explain variations in the dependent variable. The value of (R^2) is between zero and one. A small ($R^{2)}$ value close to zero means that the ability of one variable to explain the dependent variable is very limited. A value close

to one means that the independent variables provide almost all the information needed to predict the dependent variable.

RESULTS AND DISCUSSION

A. Povert

Poverty is a problem that involves many aspects because it is related to low income, illiteracy, low health levels and unequal levels between the sexes as well as a poor living environment (Word Bank, 2010: 76). In addition, poverty is also a complex problem that is influenced by various interrelated factors, including income levels, economic growth, unemployment rates, health, education, access to goods and services, location, geography, gender, and environmental location. Poverty is no longer understood only in terms of economic inability, but also the failure to fulfill basic rights and differences in treatment for a person or group of people in living a life with dignity.

Therefore, the government is working very hard to overcome the problem of poverty so that development is carried out continuously, including in determining the measurement limits to recognize who the poor are. The following data is presented on poverty by district/city in West Nusa Tenggara from to 2013.

Table 4.1
Poverty Percentage by District/City in West Nusa Tenggara 2009-2013 (percent)

No.	District/City	2009	2010	2011	2012	2013
1	Matara	15.41	14.44	13.18	11.87	10.75
2	West Lombok	24.02	21.59	19.70	17.91	17.43
3	Central Lombok	20.94	19.92	18.14	16.72	16.20
4	East Lombok	23.96	23.82	21.71	20.10	19.16
5	North Lombok	45,23	43.14	39.27	35.99	34.63
6	Sumbawa	23.85	21.75	19.82	18.26	17.04
7	West Sumbawa	23.01	21.82	19.88	17.61	17.10
8	Bima	20.42	19.41	17.66	16.23	16.08
9	Bima City	13.65	12.80	11.69	10.54	9.91
10	Domp	21.76	19.90	18.17	16.58	15.70

Source: BPS West Nusa Tenggara in 2019

Table 4.1 shows that the percentage of poor people in West Nusa Tenggara from 2009 to 2013 was highest in North Lombok District, which was 45.23 percent in

2009 and decreased to 34.63 percent in 2013. And the district/city that has the lowest percentage of poor people is Bima City, which was 9.91 percent in 2013.

B. Gross Regional Domestic Product

According to the Central Bureau of Statistics (2008: 12) Gross Regional Domestic Product is the sum of the net output value (final goods and services) generated by all economic activities in a particular region (province and district / city) and within a certain period of time (one calendar year). The economic activities in question range from agricultural activities, mining, processing industry, to services. Gross Regional Domestic Product is one of the important indicators to determine the role and potential of the economy in a region in a certain period. The following data is presented as Gross Regional Domestic Product by district/city in West Nusa Tenggara in 2009-2013.

Table 4.2
Rate of Gross Regional Domestic Product at Constant 2000 Prices by Regency/City in West Nusa Tenggara 2009-2013 (percent)

No.	District/City	2009	2010	2011	2012	2013
1	Matara	8.46	7.95	7,67	3,02	7.95
2	West Lombok	6.25	4.74	5,58	5,03	5,26
3	Central Lombok	7.28	5.66	9,05	12,16	6.24
4	East Lombok	5.73	5.01	6,12	5,40	5.51
5	North Lombok	5.07	4.32	5,69	4,13	4.11
6	Sumbawa	5.45	5.94	6,90	6,80	6.44
7	West Sumbawa	8.06	6.79	6,53	6,82	3.53
8	Bima	6.46	4.54	5,63	5,90	5.11
9	Bima City	14.86	12.77	5,33	5,82	5.58
10	Domp	5.29	4.57	7,98	6,82	5.05

Source: BPS West Nusa Tenggara 2019

Table 4.2 shows that the rate of Gross Regional Domestic Product that occurred in the regencies/cities in West Nusa Tenggara Province in 2009-2013 showed fluctuations in the rate of Gross Regional Domestic Product of each regency/city that can show the economic conditions in each regency/city in West Nusa Tenggara. Judging from the size of the Gross Regional Domestic Product, there is a relatively large economic gap between developed and underdeveloped regions.

C. Education (Literacy)

Almost no one disputes that education is a pioneer in the future development of a nation. This is because education involves character building and at the same time maintains the human identity of a nation. Many poor people experience ignorance or experience ignorance even systematically. Thus, it is important for us to understand that poverty can lead to ignorance, and ignorance is clearly synonymous with poverty.

To break the causal chain above, there is one key element: education. Because education is a means of eradicating ignorance as well as poverty. One indicator of education is the literacy rate in a region. The following presents data on literacy rates by district/city in West Nusa Tenggara for 2009-2013.

Table 4.3
Literacy Rate by District/City in West Nusa Tenggara in 2009-2013 (percent)

No.	District/City	2009	2010	2011	2012	2013
1	Matara	91.81	91.82	91.85	92.25	93.68
2	West Lombok	76.41	76.42	77.62	78.59	79.22
3	Central Lombok	71.20	71.48	72.88	73.92	75.89
4	East Lombok	79.92	80.02	82.89	83.89	86.16
5	North Lombok	71.01	71.27	76.97	77.00	77.03
6	Sumbawa	89.75	89.78	90.85	90.87	92.07
7	West Sumbawa	90.72	90.75	91.47	92.50	93.14
8	Bima	85.83	85.87	86.23	87.02	88.42
9	Bima City	92.84	93.74	93.77	93.80	95.91
10	Domp	82.82	83.69	86.35	87.94	89.07

Source: BPS West Nusa Tenggara 2019

Table 4.3 shows that the literacy rate in West Nusa Tenggara Province in 2009-2013 was the highest in Bima City at 95.91 percent in 2013 while the lowest was in Central Lombok Regency at 95.91 percent in 2013.

D. Unemploymen

Unemployment includes people who are looking for work, or are preparing a business, or think it is impossible to get a job, or already have a job but have not started working. The Open Unemployment Rate (TPT) is a figure that shows the number of unemployed people to 100 people in the labor force (Central Bureau of Statistics, 2009: 32). The unemployment rate is closely related to the population growth rate. A high

growth rate will increase the size of the labor force (the working-age population), which in turn can reduce the availability of jobs in the labor market.

The labor force itself consists of two components: people who are unemployed and people who are employed. The open unemployment rate in urban areas only shows the visible aspects of the problem of employment opportunities in developing countries which is like the tip of an iceberg. If they do not work, the consequence is that they cannot fulfill their needs properly, and this condition has an impact on the creation and swelling of poverty. The following are data on unemployment by district/city in West Nusa Tenggara for 2009-2013.

Table 4.4
Open Unemployment Rate by Regency/City in West Nusa Tenggara 2009-2013 (percent)

No.		2009	2010	2011	2012	2013
1	Matara	9.47	8.96	6.70	6.53	5.48
2	West Lombok	5.70	5.12	4.89	5.30	4.16
3	Central Lombok	5.97	5.69	5.94	5.85	5.46
4	East Lombok	6.68	3.93	4.59	4.69	6.22
5	North Lombok	4.37	3.29	4.85	3.38	4.02
6	Sumbawa	8.25	5.88	5.17	4.97	4.11
7	West Sumbawa	6.85	6.54	4.99	5.25	6.91
8	Bima	3.91	3.14	5.13	5.08	4.9
9	Bima City	8.16	9.39	6.36	6.36	9.21
10	Domp	6.90	5.31	5.87	4.75	5.13

Source: BPS West Nusa Tenggara 2019

Table 4.4 shows that the unemployment rate in West Nusa Tenggara Province in 2009-2013 was the largest in the city of Mataram at 9.47 in 2009, but in 2013 the largest was in Bima City at 9.21 percent. And the least is Bima Regency, which amounted to 3.91 percent in 2009, while in 2013 the least is North Lombok Regency at 4.02 percent.

DATA ANALYSIS RESULTS

In the regression results of the effect of population, Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013, using the *FEM* method, the regression coefficient value for each variable in the study was obtained with the following equation:

$$\text{Log}(Y) = 4.539 - 0.028 \log(X_1) - 0.059 \log(X_2) - 0.716 \log(X_3)$$

The interpretation of the regression results of the effect of Gross Regional Domestic Product, education and unemployment on poverty in the districts/municipalities of West Nusa Tenggara in 2009-2013 is as follows:

1. The constant or coefficient $ß_0$ of 4.539 indicates that if the Gross Regional Domestic Product, education and unemployment variables are considered constant or fixed then poverty will be worth 4.539 percent.
2. The Gross Regional Domestic Product variable has a negative influence on the poverty variable with a regression coefficient value of 0.028, which means that if the Gross Regional Domestic Product variable increases by 1 percent, poverty will decrease by 0.028 percent, assuming that other variables are considered constant (*ceteris paribus*). With this negative effect, it means that the Gross Regional Domestic Product variable and poverty have an inverse relationship. Which means that if the Gross Regional Domestic Product variable increases, it will cause a decrease in the poverty variable.
3. The education variable has a negative influence on poverty in districts/municipalities in West Nusa Tenggara, which is seen from the regression coefficient value of 0.059, which means that if the education variable increases by 1 percent, poverty will decrease by 0.059 percent, assuming that other variables are considered constant (*ceteris paribus*). With this negative effect, it means that the education variable and poverty have an inverse relationship. If education increases, it will cause a decrease in the value of the poverty variable.
4. The unemployment variable has a negative influence on poverty as seen from its regression coefficient value of 0.716, which means that if unemployment increases by 1 percent, poverty will decrease by 0.716 percent, assuming that other variables are considered constant *(ceteris* paribus). With this negative effect, it means that the

unemployment variable has an inverse relationship. If unemployment increases, it will cause a decrease in the value of the poverty variable.

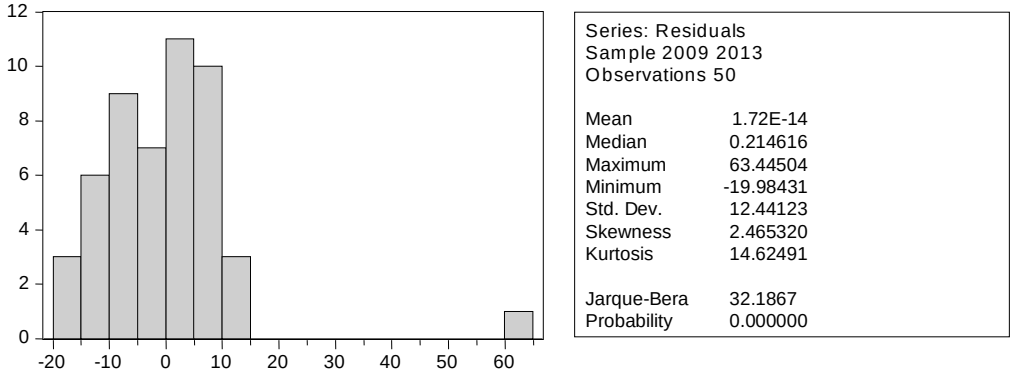
CLASSICAL ASSUMPTION TEST RESULTS

1. Test

One of the assumptions in the linear regression model is that the probability distribution of disturbance μ_i has an expected average equal to zero, is uncorrelated and has a constant variance. The normality test aims to test whether in the regression model the confounding or residual variables have a normal distribution or not (Imam Ghozali, 2002).

To test whether the data is normally distributed or not, the Jarque-Bera Test is performed. The results of the Juarque-Bear *Test* can be seen in Figure 4.1 below**.**

Figure 4.1
***Jurque Bear* test results of the influence of Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013.**



In the equation model of the effect of Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013 with n = 50 and k = 3, df = 35 (n-k) is obtained and using α 5 percent, the χ^2 table value is 49.80 compared to the *Jurque Bera* value of 32.186, it can be concluded that the data is normally distributed.

2. Test

Multicollinearity is a condition where there is a linear relationship or correlation between independent variables. In this study, to test the presence or absence of multicollinearity, it can be seen from the comparison between the R^2 value of partial *regression* (*auxiliary regression*) and the R^2 value of the main regression. If the R^2 value of partial *regression* (*auxiliary regression*) is greater than the R^2 value of the main regression, it can be concluded that multicollinearity occurs in the equation.Table 4.6 shows the comparison between the R^2 value of partial *regression* (*auxiliary regression*) with the R^2 value of the main regression.

Table 4.6 Multicollinearity Test with *Client Detection*

Variables	R^2 Model	R^2 Partial	Description
$R^2_{X1, X2, X3}$	0.359	0.112	Multicollinearity Free
$R^2_{X2, X1, X3}$	0.359	0.099	Multicollinearity Free
$R^2_{X3, X1, X2}$	0.359	0.015	Multicollinearity Free

Source :BPS (Processed)

3. Test

One of the most popular formal tests to detect autocorrelation is the *Durbin-Watson* test. This test is actually based on a correlated *error* model as shown below:

The autocorrelation test results produce a statistical DW value of. 0.588 The table value using alpha 5%, the number of samples is 50 and the number of independent variables is 3, then from the Durbin Watson table, the value of dl = 1.421 and du = 1.653 will be obtained.

Table 4.7
Autocorrelation Decision Criteria

Positive	Undecided	Free	Undecided	Negative
	DL 1,421	DU 1,653 ↓ 0.588	4-DU 2,579	4-DL 2,347

Source: BPS (Processed)

4. Test

Heteroscedasticity arises when the errors or residuals of the observed model do not have a constant variance from one observation to another. That is, each observation has a different reliability due to changes in the background conditions that

are not summarized in the model specifications (Ghozali, 2002: 23). In this study, the Park test was used to determine the presence or absence of heteroscedasticity which can be seen in Table 4.8.

Table 4.8 Glejser Test Results

Variable	Coefesien	Std. Error	t-Statistic	Prob
C	0.879	3.354	0.262	0.794
Log(KEM)	-0.140	0.983	-0.142	0.887
Log(PEN)	0.125	0.702	0.178	0.859
Log(GRDP)	-0.242	0.710	-0.341	0.734

Source: Data

From the calculation results with the Glejser test, it can be seen that none of the independent variables are statistically significant. So it can be concluded that there is no heteroscedasticity in the model.

HYPOTHESIS TEST

1. Determination Coefficient Test (R^2 Test)

The coefficient of determination (R^2) essentially measures how far the model's ability to explain the variation in the dependent variable. The coefficient of determination is zero and one. A small R^2 value means that the ability of the independent variables to explain the variation in the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable. From the regression results of the effect of Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013 from the calculation obtained the value of R^2 of 0.359. This means that 35.973 percent of the variation of district/city poverty in West Nusa Tenggara can be explained by the variation of the three independent variables, namely Gross Regional Domestic Product ($X_{1)}$, Literacy/Education ($X_{2)}$, (Unemployment) (X_3). While the remaining 64.026 percent is explained by other variables outside the model created.

2. Individual Test (t Test)

The t statistical test basically shows how far the influence of each independent variable individually in explaining the variation of the dependent variable. In the regression of the effect of population, GRDP, education and unemployment on poverty in West Nusa Tenggara in 2009-2013, with α 5 percent and *degree of freedom* (df) = 45 (n-k =50-5), the t-table value of 2.014 was obtained.

Table 4.9
Statistical t-value of the Effect of Gross Regional Domestic Product, Education and Unemployment on Poverty in West Nusa Tenggara in 2009-2013

Variable	T	T table (α = 5%)	Prob
Log(GRDP)	-1.598	2,014	0.116
Log(Pen)	-1.037	2,014	0.304
Log(Peng)	-4.738	2,014	0.000

Source: Data

a. Regional Domestic Product

From the results of multiple linear regression calculations, the t value for Gross Regional Domestic Product is 1.598 and the t table with a significant level of 95 percent (α = 5%), df = 45 is 2.014. It can be seen that the calculated t value is smaller than the t table value, so we accept H_0 and reject H_a. It can be concluded that Gross Regional Domestic Product has no significant effect on the poverty variable in districts/municipalities in West Nusa Tenggara.

Based on the probability, if the probability is greater than 0.05 then H_0 is accepted and if the probability is less than 0.05 then H_0 is rejected. From the calculation, it is known that the sig value is 0.116 or the probability is far above 0.05, so H_0 is accepted, meaning that Gross Regional Domestic Product does not have a significant effect on poverty in the districts/cities of West Nusa Tenggara.

b. Education

From the results of multiple linear regression calculations, the t value for private investment is 1.037 and in the t table with a significant level of 95 percent (α = 5%), df = 45 obtained 2.014. It can be seen that the t value is smaller than the t table value, then

we accept H_0 and reject H_a. It can be concluded that education has no significant effect on the poverty variable in the district / city of West Nusa Tenggara.

Based on the probability, if the probability is greater than 0.05 then H_0 is accepted and if the probability is smaller than 0.05 then H_a is accepted. From the calculation, it is known that the sig value is 0.304 or above 0.05, then H_a is rejected, meaning that education really does not have a significant effect on poverty in the districts/cities of West Nusa Tenggara.

c. Unemploymen

From the results of multiple linear regression calculations, the t value for government spending is 4.738 and in the t table with a significant level of 95 percent (α = 5%), df = 45 obtained 2.014. It can be seen that the t value is greater than the t table value, then we reject H_0 and accept H_a. It can be concluded that unemployment has a significant effect on poverty in the district / city of West Nusa Tenggara.

Based on the probability, if the probability is greater than 0.05 then H_0 is accepted and if the probability is smaller than 0.05 then H_0 is rejected. From the calculation, it is known that the sig value is 0.000 or far below 0.05, then H_0 is rejected, meaning that unemployment really has a significant effect on poverty in the districts/cities of West Nusa Tenggara.

3. Simultaneous Test (F Test)

Testing the effect of all independent variables in the model can be done with a simultaneous test (F test). The F statistical test basically shows whether all independent variables included in the model have a joint influence on the dependent variable.

From the results of the regression calculation of the effect of population, Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013 using a confidence level of 95 percent (α = 5 percent), with a *degree of freedom for numerator* (dfn) = 2 (k-1 = 3-1) and *degree of freedom for denominator* (dfd) = 45 (n-k = 50-5), the F table is 2.812. From the regression results of

the effect of Gross Regional Domestic Product, education and unemployment on poverty in West Nusa Tenggara in 2009-2013 obtained F statistics of 8.615 and the probability value of F statistics 0.000 So it can be concluded that the independent variables together influence on the dependent variable (F count> F table).

DISCUSSION OF RESULTS

a. Gross Regional Domestic Product and

The Gross Regional Domestic Product variable shows a negative sign but has no significant effect on Poverty in West Nusa Tenggara. These results are not in accordance with the theory and previous research which is the theoretical basis for this study. Which according to Arsyad (2016: 24), growth and poverty have a very strong correlation, because in the early stages of the development process poverty tends to increase and when approaching the final stage of development the number of poor people gradually decreases.

Furthermore, Todaro (2006:50) reveals the importance of accelerating economic growth to reduce the number of poor people. Because with rapid economic growth, poverty in a region can be reduced in number. Which poverty is one indicator of the success of regional development. The insignificance of Gross Regional Domestic Product in influencing poverty can also be seen based on data that the increase in the rate of Gross Regional Domestic Product in West Nusa Tenggara from 2009 to 2013 was not always accompanied by a decrease in poverty in West Nusa Tenggara. As with the growth of Gross Regional Domestic Product from 2009 to 2013, there was an increase in poverty.

b. Education and

The education variable proxied by the literacy rate shows a negative sign and has an insignificant effect on the poverty rate in West Nusa Tenggara. An increase in the literacy rate as an indicator of education in West Nusa Tenggara by 1 percent will reduce poverty by 0.059 percent. Which means that an increase in literacy rate will reduce

poverty in West Nusa Tenggara. These results are in accordance with the theory and previous research which is the theoretical basis for this study. According to Todaro, (2006:23), education in many countries is a way to save themselves from poverty.

Where it is described that a poor person who expects a good job and high income must have a high level of education. But higher education can only be achieved by the rich. Meanwhile, poor people do not have enough money to pay for education to higher levels such as high school and university. So it can be said that the level of education is very influential in increasing poverty.

c. Unemployment and

From the regression results produced in this study, it shows that the unemployment variable shows a negative sign and has a significant effect on poverty in West Nusa Tenggara. Where an increase in the open unemployment rate by 1 percent does not increase poverty but from the results of this study will actually reduce poverty by 0.716 percent. These results are not in accordance with the theory and previous research which is the theoretical basis for this study. The results of the study that showed a negative effect of unemployment on poverty can also be seen based on open unemployment data at West Nusa Tenggara Regency / City from 2009-2013 which shows that the number of open unemployment continues to increase, while the poverty data in 2009-2013 actually decreased.

Not all unemployed people are always poor. Because just like the population included in the open unemployment group, there are several kinds of unemployed people, namely those who are looking for work, those who are preparing a business, those who are not looking for work because they feel it is impossible to get a job and finally those who already have a job but have not started working. According to Subandi, (2012:10) poverty may not always be related to labor problems.

This is reinforced by the opinion of Arsyad (2004:50) who states that it is wrong to assume that everyone who does not have a job is poor, while those who are fully

employed are rich. This is because sometimes there are workers in urban areas who do not work voluntarily because they are looking for better jobs that are more in line with their level of education. They refuse jobs that they feel are inferior and they do so because they have other sources of financial support.

LITERATURE

Arikunto Suharsimi (2002): Porsudur Research Practical Approach, Publisher Rineka Cipta Jakarta

Arsyad, Lincolin, (2004), Development Economics. Yogyakarta: STIE Yayasan Keluarga Pahlawan

Arsyad Lomcolon (2016) Introduction to Regional Economic Development Planning Third Edition. BPFE Yogyakarta

Arief Daryanto and Yundi Hafizrianda (2012) Quantitative Models for Regional Economic Development Planning Concepts and Applications. IPB Press

Amalia and Aprilianti (2016) The Effect of Population, GRDP, HDI and Unemployment on Poverty Levels in East Java Regency / City in 2011-2015. Master's Thesis in Economics, Bhayangkara University.

Badan Pusat Statistik, (2009), GRDP of Lombok Timur Regency by Business Field and Use 2005-2009

Central Bureau of Statistics (2014) West Nusa Tenggara Province in

Central Bureau of Statistics (2013) West Nusa Tenggara Province in Figures

Central Bureau of Statistics (2012) West Nusa Tenggara Province in Figures

Central Bureau of Statistics (2011) West Nusa Tenggara Province in

Central Bureau of Statistics (2010) West Nusa Tenggara Province in

Central Bureau of Statistics (2009) West Nusa Tenggara Province in

Dody Ariefianto (2012) Econometrics Essentials and Applications Using Eviews. Publisher

Firdaus, Muhammad, (2004), Econometrics An Applicative Approach. Jakarta: PT Bumi

Gujarati, D.N, (2004), Basic Econometrics. K-4th Edition New York: McGraw-Hill Companies

Ghozali Imam (2002): Application of Multivariate Analysis with the SPSS Program, Dipanegoro University Publishing Agency Semarang.

Hasan Iqbal, (2008), Principles of Statistics 2 Second Edition. Jakarta: Raja Grafindio Persada.

Jhingan, ML, (2002), Development Economics and Planning. Jakarta: Raja Gerafindo Persada.

Mankiw, (2003), Introduction to Economics Second Edition. Jakarta: Erlangga Publishers.

Nangan, M, (2001), Macroeconomics Theory, Problems, and Policy Second Edition. Jakarta: Raja Gerafindo Persada.

Nachrowi and Hardius Usman (2006) Popular and Practical Approaches to Econometrics for Economic and Financial Analysis Equipped with Analysis Techniques and Data Processing with SPSS and EVIEWS. Publishing Institute of the Faculty of Economics, University of Indonesia

Nachrowin Djalal Nachrowi and Usman, Hardius, (2005), Introduction to Econometric Techniques Popular and Practical Approaches Equipped with Analysis Techniques and Data Processing Using the SPSS Program Package Revised Edition. Jakarta: PT Raja Grafindo Persada.

Nurfauziah Fitria (2017) Analysis of the Effect of GRDP, Education Level and Unemployment Rate on Poverty Level in Central Java Province for the Period 2009-2015. Thesis of Postgraduate Program UIN Sunan Kalijaga Jogjakarta

Ni Nyoman Yuliarmi, (2008), The Effect of Household Consumption, Investment and Government Expenditure on Gross Regional Domestic Product (GRDP) of Bali Province. "Bulletin of Economic Studies, Vol. 13, Number. 2, pp. 102-118.

Purba, Adearma, (2006), Analysis of Factors Affecting Economic Growth in Sumalunggung Regency in 1976-2003.

Master of Science Thesis in the Development Economics Study Program at the Postgraduate School of the University of North Sumatra Medan.

Rahardja and Manurung, (2001), Macroeconomic Theory An Introduction Fourth Edition. Jakarta: BPFE UI.

Ravi Dwi Wijayanto (2010) Analysis of the Influence of GRDP, Education and Unemployment on Poverty in Regency/City of Central Java in 2005-2008. Thesis Master of Economics Development Studies Dipanegoro University Semarang.

Rahmawati Fathurohmin (2011) The Effect of GRDP, Life Expectancy and Literacy on Poverty Level (Case Study of 35 Districts/Cities in Central Java). Master's Thesis in Economics and Development Studies Uin Syarif Hidayatulah Jakarta

Raharjo, Adi, (2006), The Effect of Government Expenditure, Private Investment and Labor Force on Economic Growth in 1982-2003 (Case Study in Semarang City). Thesis Program of Economics and Development Studies Dipanegoro University Semarang.

Riduwan and Sunarto, (2010), Introduction to Statistics for Educational, Social, Economic and Business research. Publisher: Alfabeta Bandung.

Todaro (2006) Economic Development. Ninth Edition: Erlangga Publishers.

Subandi (2012) Development Economics. Alfabeta Publisher.

Istiqamah (2017) the effect of GRDP, Education and Unemployment on Poverty in Sambas Regency. Journal of Management

Made Mayanti (2013) the effect of GRDP, Education and Unemployment on Poverty in Bali Province. Journal of EP Unud

Destiana (2012) The Effect of GRDP and Illiteracy Rate on Poverty in Bondowoso Regency. Scientific Article University of Jember.

Sugiyono (2007) Quantitative Qualitative Research Methods and R & D. Publisher Alfabeta Bandung

Samsubar Saleh (2001) Inductive Statistics Revised Edition. UPP AMM YKPN

Suliyanto (2011**)** Applied Econometrics Theory and Application with SPSS. Publisher Andi