
Influence of Economic Growth and Inequality of Income to Total Poverty in The Province of West Nusa Tenggara (NTB)

Wira Hendri¹, Lalu Rizal Ihwandi², & Taufan Iswandi³

¹University Of Gunung Rinjani

²University Of Gunung Rinjani

³University Of Gunung Rinjani³, Indonesia

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Abstract

This study aims to analyze the effect of economic growth and income inequality on poverty alleviation in the province of West Nusa Tenggara. The research variables used in this study are the variables of economic growth, income inequality and the number of poor people in the province of West Nusa Tenggara. The type of data used in this study is quantitative data in the form of panel data with a time span of January 2018 to December 2020. The data source is obtained from BPS. The writing method uses multiple regression in the form of logarithms. The results of the analysis conclude that the variable economic growth has a significant effect on the development of the number of poor people in the province of West Nusa Tenggara due to the contribution of the balancing fund that dominates the economy in NTB reaching almost 70 percent of total regional income so that economic development is still drawn by the central government.

The income inequality variable has no significant effect on the number of poor people in the province of West Nusa Tenggara. The significant inequality of income towards the number of poor people is due to the development programs carried out by local governments that are not evenly distributed in each region, especially in rural areas.

Keywords: Economic growth, income inequality, number of poor people and multiple regression.

1. Introduction

Economic development is essentially aimed at improving the welfare of the community, in order to improve the welfare of the community, it is necessary to increase economic growth and a more equitable distribution of income. The increase and growth of the regional economy will have an influence on increasing the welfare of the people in the region (Raswita & Made, 2013).

Inequality of development between one region and another has an impact on the balance of the cycle of economic activity which affects the inequality of prosperity between the regions concerned. Tambunan (2001) states that the concentration of economic activity in a particular area directly impacts on income inequality between regions so as to create

conditions where the area that is the center of concentration of economic activity will be better able to provide higher income to its people so that the community is relatively more prosperous, while on the other hand Regions that are not centers of economic activity are only able to provide low income, resulting in relatively low prosperity for the people.

According to Adelman and Morris (1973) in general, what causes the inequality of income distribution in developing countries is a high population growth which results in a decrease in per capita income, inflation due to an increase in money income but not proportionally to an increase in the production of goods and services. People, inequality in development between regions, capital intensive so that the percentage of capital income from additional assets is greater than the percentage of income originating from work so that unemployment increases, social mobility is low, import substitution industrial policies that result in an increase in the price of goods industrial products, deteriorating exchange rates for developing countries with developed countries, and the destruction of people's handicraft industries, and others (Arsyad, 2004).

Economic growth, income inequality, and poverty are issues that are always interesting to study. Experts devote considerable attention to this (Lin, 2003; Bourguignon, 2004; Ravalion, 2005; and Warr, 2000, 2006 in Wijayanto, 2016). High economic growth will increase economic capacity (Gross Domestic Product-GDP). It is hoped that a high GDP will create a trickle down effect so that people's welfare will increase. Issues of economic growth, income inequality and poverty have long been the main focus of economic development at both global and national levels. The analysis of the triangular relationship between these three things has been the subject of a long and very interesting debate, especially in the selection of economic development strategies in poverty alleviation efforts. First, whether to prioritize high economic growth to the exclusion of the distribution of income. Second, whether to prioritize a more equitable distribution of income without sacrificing economic growth. On the other hand, the problem of poverty and income inequality will also hamper the rate of economic growth itself. In addition, poverty and income inequality will also have an impact on social instability, uncertainty, and human tragedies such as hunger, poor health and malnutrition. If this situation continues, it will eventually disrupt macroeconomic stability and the continuity of the existing government. According to Arsyad (1999) in Hajiji (2010) a high level of economic growth has little benefit in solving the problem of poverty, there are still many people who have income below the standard of living needs. Economic growth fails to reduce or even eliminate absolute poverty. So rapid GDP growth does not automatically increase the standard of living of its people. In other words, the so-called "Trickle Down Effect" or the downward effect of the benefits of economic growth for the poor did not occur as expected and even tended to run very slowly.

The gap in economic development between districts/cities in West Nusa Tenggara Province based on GRDP data between districts/cities can be seen from the GRDP values between districts/cities differing and during the last three years the GRDP value of each district/city has increased. . This can be seen from the following table:

Table. 1 GRDP Of NTB Province Based On 2020 Constant Prices

County/city	PDRB		
	2018	2019	2020
West Lombok Regency	15 313	15 676	14 368
Central Lombok Regency	12 685	13 088	12 112
East Lombok Regency	11 557	12 014	11 565
Sumbawa Regency	22 005	22 878	21 750
Dompu Kabupaten County	19 461	20 053	19 160
Bima District	16 321	16 853	16 112
West Sumbawa Regency	89 405	86 040	108 014
North Lombok Regency	15 030	15 779	14 486
Mataram City	27 398	28 377	26 331
Bima City	16 973	17 505	16 317

Source: Central Bureau of Statistics NTB

Based on table 1 above, for three consecutive years, West Sumbawa Regency has the highest position in terms of GRDP compared to other regencies in NTB. Then followed by the city of Mataram and Sumbawa regency. Meanwhile, the lowest is East Lombok. The difference in the level of development as indicated by the difference in the value of GRDP will have the impact of differences in the level of welfare between regions which in turn causes regional disparities between regions to widen and can hinder regional economic development.

2. Literature Review

Nafziger (2006) states that economic growth is an increase in a country's production or per capita income. The production is calculated by GNP (Gross National Product - Gross National Product) or GNI (Gross National Income - Gross National Income) which is the total output of the country. Economic growth also means increasing the economic capacity of a region in a certain time. The concept of GDP is used at the national level, while at the provincial and district/city levels the concept of GRDP is used. GDP or GRDP can be measured using 3 different approaches, namely the production approach, the income approach and the expenditure approach (Tambunan, 2003). The production approach and income approach are approaches from the aggregate supply side (AggregateSupply - AS) while the expenditure approach is an approach from the aggregate demand side (AD).

According to Adam Smith (classical economist), there are two main aspects of economic growth, namely (1) total output (GDP) growth and (2) population growth. These two aspects are related to each other. With regard to total output growth, Smith sees a country's production system consisting of three main elements, namely available natural resources, human resources (population) and the existing stock of capital goods. Available natural resources are the most basic container of the production activities of a society. The amount of available natural resources is the maximum limit for the economic growth. That is, as long as these resources have not been fully utilized, the other two elements of production that play a role in the production process are the population and the existing capital stock.

According to Kuznets in Todaro (2004), 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 is determined by progress or technological, institutional (institutional) and ideological adjustments to various demands of the existing situation. In addition, Todaro (2003) states that there are 3 factors in economic growth in each country, namely; (1) Capital accumulation, including all types of new investments invested in new factories, land, physical equipment and distribution of human resources can also improve their quality, so that in the end it will have a positive impact the same for production figures. Capital accumulation occurs when part of the income is reinvested with the aim of increasing output or income in the future; (2) Population growth (growth in population) means population growth followed by labor growth as one of the positive factors that spur economic growth. This means that the increase in population will increase the amount of productivity. Greater population growth will lead to greater domestic market growth, but the positive or negative of population growth in economic development depends entirely on the ability of the economic system to absorb any additional labor force; (3) Technological progress is the most important source of economic growth, because with technological progress, new methods or new technologies will be found to replace old methods so as to increase economic growth rapidly.

Received by society is not evenly distributed. Inequality is determined by the level of development, ethnic heterogeneity, inequality is also associated with dictatorships and governments that fail to respect property rights (Glaeser, 2006). Alesina and Rodrik (1994) state that income inequality will hinder growth. This is because inequality causes income redistribution policies which of course will be expensive. Todaro and Smith (2006) stated that income inequality will cause several things, including:

1. Extreme income inequality will lead to economic inefficiency.
2. Extreme income inequality will weaken social stability and solidarity.
3. Extreme income inequality is generally considered unfair.

Poverty is not only related to income levels, but also from social, environmental and even empowerment aspects and levels of participation, as described by the World bank (2000) in Harniati (2007) defines poverty as follows: "Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to go to school and not knowing to know how to read. Poverty is not having a job, poverty is fear for the future, living one day at a time. Poverty is powerlessness, lack of representation and freedom". According to the Central Statistics Agency (BPS) people who are unable to meet the minimum basic needs are categorized as poor. The poverty line value used refers to the minimum need of 2,100 kcal per capita per day plus the minimum non-food needs which are a person's basic needs which include basic needs for housing, clothing, schools, transportation, and other basic household and individual needs. The amount of expenditure (in rupiah) to meet the minimum basic needs for food and non-food is called the poverty line (BPS, 2007).

3. Research Methods

This study took place in West Nusa Tenggara Province during the period 2018 - 2020, analyzing the linkages of economic growth, income inequality and poverty alleviation. The type of data used in this study is secondary data in the form of panel data. Panel data is a combination of time series and cross section data. The data source was obtained from the Central Statistics Agency of West Nusa Tenggara Province. The data used include GRDP data, Gini Ratio data and data on the number of poor people in West Nusa Tenggara Province, the period studied is from 2018 to 2020. This study uses the variable of economic growth as a proxy for regional gross domestic product, income inequality as a proxy for the Gini Ratio, the number of poor people.

The analysis in this study is intended to answer the problems previously stated, namely to analyze the relationship between economic growth, income inequality and poverty in the Province of West Nusa Tenggara. As a data processing tool using Eviews 4.1 software which produces descriptive analysis output.

$$\text{LogP} = \alpha + \beta_1 \log Y + \beta_2 \log G + \varepsilon$$

where :

P : number of poor people (in souls)

Y : constant GRDP (in units of IDR million)

G : Gini index (value between 0 and 1)

α : intercept (fixed/random effect for district i)

ε : error term

t : 2018 to 2020

4. Results and Discussion

The results of the processed data on the amount of poverty using the Eviews 1 software can be seen in Table 1 below:

Table 2 Results of Eviews . Data Processing

Dependent Variable: POVERTY LOGO				
Method: Panel Least Squares				
Date: 12/13/21 Time: 14:43				
Sample: 2018 2020				
Cross-sections included: 10				
Total panel (balanced) observations: 30				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.55291	2.297040	4.594136	0.0001
LOGPDRB	-0.859056	0.198487	-4.328017	0.0002
LOGGINIRASIO	-1.895938	1.347733	-1.406761	0.1709
R-squared	0.421334	Mean dependent var		4.018262
Adjusted R-squared	0.378470	S.D. dependent var		0.781263
S.E. of regression	0.615926	Akaike info criterion		1.963259
Sum squared resid	10.24284	Schwarz criterion		2.103378
Log likelihood	-26.44888	F-statistic		9.829524
Durbin-Watson stat	2.059680	Prob(F-statistic)		0.000621

Source: Eviews

Based on the data processing table above, it is obtained the multiple linear regression equation $\log P = 10.55291 - 0.859056Y - 1.895938G + e$ with the following interpretation:

$a = 11,14367$ meaning that if the GRDP and Gini ratio are zero percent, the number of poor people is 10,55291 percent.

$\beta_1 = -0.859056$ meaning that if GRDP increases by one percent, the number of poor people decreases by -0.859056 percent assuming the Gini ratio is *ceteris paribus*.

$B_2 = -1.895938$ means that if income inequality increases by one percent, the number of poor people decreases by 1.895938 percent with the assumption of GRDP *ceteris paribus*.

Based on the table of data processing eviews 4.1 above, it shows that the GRDP variable has a negative and significant effect on the number of poor people in NTB. This can be seen by comparing t_{count} with t_{table} . If $t_{count} < t_{table}$ or $t_{count} > t_{table}$ then GRDP has a significant effect on the number of poor people. On the other hand, if $t_{table} < t_{count} < t_{table}$, then GRDP does not have a significant effect on the number of poor people. Based on the data processing table above, the value of $t_{count} \text{ GRDP} = -4.328017 > t_{table} = -1.96$ shows that the GRDP variable has a significant effect on the number of poor people in the province of West Nusa Tenggara.

The variable income inequality/gini ratio has a negative but not significant effect on the number of poor people in NTB. It can be seen based on the value of $t_{table} = -1.96 < t_{count} = -1.406761 < t_{table} = 1.96$.

Simultaneous test on the data processing table above shows that GRDP and income inequality/gini ratio together have a significant effect on the number of poor people in NTB ($0.000 < 0.05$).

Variations in the formation of the number of poor people in the research model are explained by the GRDP variable and income inequality of 37.84 percent while the remaining 62.16 percent is explained by other factors that are not included in the research model such as institutions in society, culture and traditions and others.

Based on the results of data analysis, it can be seen that the variable economic growth has a significant effect on the number of poor people in the province of West Nusa Tenggara. It can be seen from the value of $t_{count} = -4.328017 > t_{table} = 1.96$. Significant economic growth in NTB is still driven by the contribution of the balancing fund that dominates the economy in NTB. This can be seen from the high dependence of the regions on aid funds from the center. Based on the results of the analysis of the contribution of the balancing fund to the regions, it shows that during the period 2018 to 2020 the magnitude of regional dependence in financing development reached almost 70 percent so that economic development was still drawn by the central government.

The income inequality variable has no significant effect on the number of poor people in the province of West Nusa Tenggara. It can be seen from the value of $t_{table} = -1.96 < t_{count} = -1.406761 < t_{table} = 1.96$. The non-significance of income inequality to the number of poor people is due to the development programs carried out by local governments that are not evenly distributed in each region, especially in rural areas.

5. Conclusion

Based on the data analysis and discussion above, it can be concluded as follows:

The economic growth variable has a significant effect on the number of poor people in the province in West Nusa Tenggara Province due to the contribution of the balancing fund that dominates the economy in NTB reaching almost 70 percent of the total regional income so that economic development is still drawn by the central government.

The income inequality variable has no significant effect on the development of the number of poor people in NTB. This is because the development programs carried out by local governments are not evenly distributed in each region, especially in rural areas.

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