

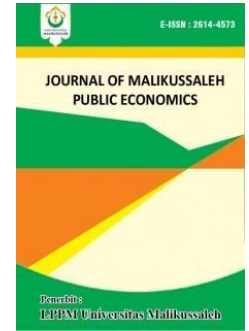
EFFECT OF GROSS REGIONAL DOMESTIC PRODUCTS AND REGIONAL EXPENDITURE TO POVERTY IN REGENCIES SUMATERA INDONESIA 2014-2016

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ARTICLE INFORMATION

ABSTRACT

Keywords:

Poverty, GRDP, and Regional Expenditures

The purpose of this study is to determine the effect of Gross Regional Domestic Products (GRDP) and Regional Expenditure on Poverty in Regencing of North Sumatra indonesia 2014-2016. This study uses a panel data obtained from the Central Bureau of Statistics. The data analysis method used in this study is a panel data regression analysis method with Random Effect Model. The results show that GRDP has a positive influence on poverty, while Regional Expenditures do not affect poverty.

1. INTRODUCTION

A Regional development is an integral part of national development. Economic development is also interpreted as a change that increases national production capacity. The changes will be occur in term of economic growth, minimize income inequality and eradicate poverty (Todaro, 2000).

The aim of regional development is to create the welfare or prosperity of the people in the area, through economic development and the welfare of the people in each region, through high, efficient and effective economic development (Tambunan, 2003).

Poverty is a complex and multidimensional problem and will be a barrier in achieving a country's level of development or growth. So that it requires the active role of various parties, suchas either the central government, or the regional government, and the community itself. In a decade, poverty in Indonesia a decline both in percentage and in the number of poor people.

In the last three years, as shower in table 1 below there have been three regencies that experienced relatively high poverty in North Sumatra Province. The first city of Medan has the highest number of poor people with a total of 614,690 inhabitants. In the second sequence there is Langkat with a total of 330,610 poor people. The last rank is in Deli Serdang, the number of poor people in this regency reaches 286,660 people.

Table 1
Amount of Poverty, Gross Regional Domestic Product, and Regional Expenditure Budget in North Sumatra Province
Tahun 2014-2016

year	Poverty (Soul)	PDRB (Rupiah)	Regional Expenditures (Rupiah)
2014	1.360.620	433.163.900.000	32.396.047.584
2015	1.463.660	446.935.600.000	35.335.798.015
2016	1.455.960	481.317.500.000	43.034.041.548

Sumber : BPS Sumatera Utara 2017 (data diolah), Lampiran 1

Based on Table 1 above, it can be seen that the number of poor people in North Sumatra Province in the last three years has been fluctuation

from 2015-2016. Where in 2015 the number of poor people increase from 1,360,620 people to 1,463,660 people. Then in 2016, it to 1,455,960 people. Meanwhile, the regional expenditure budget issued by the government, both the central government and regional governments, has been increasing from year to year.

The objectived of study are to determine the overall effect of gross regional domestic product and regional expenditure on poverty in the regencies of North Sumatra in 2014-2016.

2. LITERATURE REVIEW

Poverty

According to Suryawati (2004) poverty is a condition of underprivileged income and sufficient basic living necessities so that it can cause a person unable to guarantee their survival. Income capability in meeting basic needs in accordance with certain price standards is very low, so it cannot guarantee the fulfillment of standards of living needs in general.

Gross Regional Domestic Product

According to Mankiw (2005) GDP is the end result of the production of goods and services within a certain time span in an economy.

Regional Expenditures

According to R. Indonesia (2000), it was revealed that the definition of regional expenditure is all money in the regional treasury issued for a particular fiscal year which can be used as a regional budget.

3. RESEARCH METHODS

This research includes data on GRDP, Regional Expenditures, and Poverty by using a quantitative approach, according to publication data from the Central Sumatra Statistics Agency 2014-2016. Data used in this study in the form of a data panel. According to Gujarati (2003), explained that there are three approaches or ways to estimate the data panel. The first is the least squares approach (Common Effect), the second is the Fixed Effect approach, and the third is Random Effect approach.

The chosen method is adjusted based on the availability of data and reliability between variables. This study was conducted in all regencies in North Sumatra. This research model employ is log-linear. The equation becomes as follows:

$$\text{Log KM} = \beta_0 + \beta_1 \text{Log PDRB}_{it}$$

Annotation:

Log :log-linear

Log KM :log natural poverty variable

Log PDRB :log natural GRDP variable

Log BD :log natural Regional Expenditure variable

I :cross-section

t :time series

β_0 : konstanta

$\beta_1\beta_2$: koefisien

U : error term

4. RESEARCH RESULTS AND DISCUSSION

Results of the Panel Data Model Estimation

Panel data analysis using the Random Effect method was the right choice in this study. Based on the poverty model regression analysis, information can be obtained among others:

1. If the GRDP and Government Expenditure variables are considered constant at 0, then the overall poverty in the regencies of North Sumatra is -6.357671 percent.
2. GDP variable obtained regression coefficient value of 0.577475. This means that if the GRDP variable increases by 1 percent, it will increase the Poverty variable by 0.577475 percent.
3. The Government Expenditure variable regression coefficient has a value of -0,010982. This means that if the Government Expenditure variable increases by 1 percent, it will automatically reduce the Poverty variable by 0.010982 percent.

Result of Classic Assumption Test

With the selection of Random Effect Model, it is not relevant to carry out the classical assumption test. This occurs because Random Effect Model uses the Generalized Least Square (GLS) estimation method. Where the technique is believed to overcome autocorrelation between observations (cross -section). The Generalized Least Square method can produce an estimator to fulfill the Best Linear Unbiased Estimation (BLUE) character which is a treatment method to overcome violations of heteroscedasticity assumptions (Lestari, A. and Setyawan, 2017).

Result of Multicollinearity Test

Correlation matrix value of 0.76458765 is not that than 0.8, which means there are no symptoms of multicollinearity.

Result of T test

The results of testing the GRDP variable obtained at statistical value of 9.708431 and, table of 1.66088, it can be concluded that the statistical value is greater than the t table. This means that GRDP has a positive and significant effect on poverty in the regencies North Sumatra province Indonesia. The Regional Expenditure variable obtained at statistical value of -0,600883, while the t table for 1,66088 it can be concluded that the statistical value is smaller than the value of the t table. This means that regional expenditure has no negative and no significant effect on poverty in the regencies of North Sumatra Indonesia. This can also be seen in the P-value probability value of $8\ 0.5493 > 0.05$, the Regional Expenditure variable is not significant.

Result of Test F

The results of testing the GDP and Expenditure variables obtained a Fstatistic value of 51.40121 and Ftable of 3.09, it can be concluded that the Fstatistic value is greater than the Ftable value, namely: $51.40121 > 3.09$. The meaning is that the Regional GDP and Expenditures have a simultaneous and significant effect on poverty in the regencies of North Sumatra Indonesia. This can also be seen in the probability value of P-value of $0.0000 < 0.05$, the GDP and Regional Expenditure variables are significant.

Determination Coefficient Test R^2

From the regression results of the influence of Regional GDP and Expenditures on Poverty in regencies of North Sumatra in 2014-2016, the determination coefficient is 0.507048. This means that the GRDP variable and the Regional Expenditure variable are able to explain variations to the Poverty variable by 50.70 percent.

Discussion Effect of Gross Regional Domestic Product on Poverty

From the results of the analysis that has been done, the GRDP variable has a positive and significant effect on Poverty. This is in accordance with the research conducted by (Sinaga, 2013).

Effects of Regional Expenditures on Poverty

From the results of the analysis that has been carried out that the Regional Expenditure variable is stated to have no effect and is not significant to Poverty. This is in accordance with the research conducted by (Rudiningtyas, 2012).

The results of the estimation equation for the poverty model are:

$$KM = -6,357671 + 0,577475PDRB - 0,010982BD + U$$

While the regression equation for individuals in each regencies, for example, can be taken by Asahan district:

$$KM = 0,261060 - 6,357671 + 0,677475PDRB - 0,010982BD + U$$

5. CONCLUSIONS AND SUGGESTIONS

Conclusion

In accordance with the results of the research, conclusions can draw as follows:

1. It can be stated that GRDP has a positive and significant effect on poverty in the regencies of North Sumatra in Indonesia 2014-2016.
2. The Regional Expenditures have no effect and are not significant towards Poverty in the regencies of North Sumatra in Indonesia 2014- 2016.
3. While the results of testing together (simultaneous) with the Random Effect Model approach that Regional GDP and

Expenditures influence and significantly affect the Poverty in the regencies of North Sumatra Indonesia 2014- 2016.

4. The appropriate model is used for the research variable Gross Regional Domestic Product (GRDP) and Regional Expenditure on Poverty in the regencies of North Sumatra in 2014-2016, namely the Random Effect Model.

Suggestion

This study present several suggestion as follow:

1. The government should be more careful in determining the policies that been made, so that it can encourage economic growth in North Sumatra. It should be concern equal distribution of income between regions in each layer of North Sumatra Province, so that there can be no inequality in development in each regencies.
2. It is hoped that the government will better realize the path of development strategies, especially pro-poor people, so that they can reduce the number of poor people as much as possible by improving the social protection system and conducting community empowerment.
3. suggestion for the next research should add independent variables that are possible relevant to poverty, such as central Government Expenditure.

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