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THE EFFECT OF INVESTMENT AND EXPORTS ON GROSS REGIONAL DOMESTIC PRODUCT (GRDP) IN GORONTALO PROVINCE

Elvira Yahya
Fahrudin Zain Olilingo
Ivan Rahmat Santoso
Faculty of Economics, Department of Economics, State University of Gorontalo
Corresponding Author: ivan_santoso@ung.ac.id

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Abstract:

This study aims to determine the effect of investment and exports on GRDP in Gorontalo Province. The data used in this study is secondary data in the form of data from 6 regencies/cities (Boalemo Regency, Gorontalo Regency, Pohuwato Regency, Bone Bolango Regency, North Gorontalo Regency and Gorontalo City) which in the 2015-2019 period were sourced from BPS (Central Bureau of Statistics). statistics). The method used in this study is multiple linear regression analysis using panel data. The results of the analysis show that the investment variable has a positive and significant influence on the GRDP of Gorontalo Province. This means that investment in Gorontalo Province can increase GRDP significantly from 2015-2019. It is said to be significant because investment is an indicator of economic growth as well as expenditures to buy capital goods and production equipment with the aim of replacing and especially increasing capital goods in the economy that will be used to produce goods and services in the future. front. The net export variable has a positive and significant influence on the GRDP of Gorontalo Province, meaning that net exports in Gorontalo Province can increase GRDP significantly from 2015-2019. It is said to be significant because net exports are an important factor in increasing regional and state economic growth. Investment and export variables simultaneously have an influence on the GRDP of Gorontalo Province.

Keywords: GRDP, Investment, Export

INTRODUCTION

The benchmark of a country's economic growth can be seen from its ability to produce goods and services. One of them can be seen from the national income. National income is the value of goods and services produced by a country in a certain period of time, usually one year. This calculation of national income aims to get an idea of the economic level that has been achieved and the value of the output produced. If you want good economic growth. then the country concerned must also increase the physical production of both goods and services (Sahi et al., 2020). Production must increase because the population also continues to increase so that the standard of living of the people does not decrease. It is also said that there is a positive relationship between the production factors used, the more supported by good social justice and sophisticated technology, the higher the national income. According to the views of classical economists, there are four factors that influence economic growth, namely population, total stock of capital goods, land area and natural wealth from the level of technology used.

Investment plays a very important role in the development process of many countries in the world, as well as in Indonesia (Istiqomah et al., 2019) and is one of the determinants of economic growth that is able to encourage a significant increase in output and increase demand for inputs, one of which is labor. (Sasana, 2019). The amount of investment will affect job opportunities and increase labor absorption so that community welfare is achieved due to the increase in income received by the community, as well as an indicator of the economic growth and development of a region and is a factor that affects economic development. As one of the factors that affect employment opportunities, investment can be interpreted as spending and spending on investment or companies to buy capital goods and production equipment to increase the ability to produce goods and services available in the economy (Tiffen & Mortimore, 1994). In addition to maximizing investment output, it also determines the distribution of labor and income distribution as well as the quality of the population and technology.

Investment and exports play an important role in the economic activities of a country or region. Exports will generate foreign exchange which will be used to finance imports of raw materials and capital goods to meet and create added value (Asbiantari et al., 2016; Mohamed, 2017). Aggregation of added value generated by all production units in the economy is the value of Gross Domestic Product (GDP). The greater the added value produced in an item, the greater the income obtained by the community. The amount of added value obtained by a country or region in exporting goods will certainly accelerate a region to develop rapidly because GDP increases. Several previous studies have discussed the relationship between investment and exports to GRDP (Abdulla & Ali, 2019; Kartikasari, 2017). Some of these findings indicate that investment and exports have a correlation with GRDP. With the relationship of these three variables will have an impact on the economy of a region. Because by increasing the GDP of a region, it will increase investment and exports. This study aims to investigate the effect of investment and exports on economic growth and how big they are.

RESEARCH METHOD

This study uses a quantitative approach using panel data over a period of time (time series). This study was conducted in Gorontalo Province, which consists of 5 regencies 1 city, which is divided into several regions, namely Gorontalo Regency, Boalemo Regency, North Gorontalo Regency, Bone Bolango Regency, Pohuwato Regency and Gorontalo City. The data objects in this study consist of GRDP, Investment and Export data. The type of data to be used is secondary data and is obtained through data published on the official website of the Central Statistics Agency (BPS) of Gorontalo Province. The data used is panel data, which is a combination of Cross Section and Time Series data. Cross Section data used is based on 5 districts and 1 city in Gorontalo Province and for Time Series data used data from 2015-2019. The analysis technique used is quantitative analysis, the analytical method used is multiple linear regression analysis using panel data (Chamberlain, 1982). In estimating the regression model with panel data, there are three approaches that are often used, namely the Common Effects model, Fixed Effect model, and Random Effect model.

RESULTS AND DISCUSSION

Based on the Chow and Hausman tests, the best panel data regression model was determined using **FEM**. The results of the estimation of the regression model and the selection of panel data above, then the results of the panel data regression analysis using the Fixed Effects Model (REM) model. The estimated output using FEM is presented in the table below:

Table 1. FEM. Estimation output

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1026676.	337218.5	-3.044542	0.0059
INVEST	**4.845214**	0.135531	35.74986	*****0.0000**
NetEKS	**1.822238**	0.438236	4.158117	*****0.0004**
R-squared	**0.999243**	**F-statistic**		**4149.434**
Adjusted R-squared	**0.999002**	**Prob(F-statistic)**		*****0.0000**

Information: Sig Level : *** = 1%; ** = 5%; end * = 10%.

Source: Output Eviews 9

Based on the results of the output of the FEM model in Table 1, it can be seen that: (1) the Investment variable has a positive effect on the Economic Growth of Gorontalo Province, this means that for every additional 1% of investment, the value of Gorontalo Province's Economic Growth will increase by 4.845214; (2) Export variable has a positive effect on the Economic Growth of Gorontalo Province, this means that for every additional 1% of Export, the value of Gorontalo Province's Economic Growth will increase by 1.822238.

Partial Test

The t-test is used to determine how far one independent variable individually can explain the dependent variable. Based on Table 1 above, it can be seen that: (1) Investment has a significant effect on the Economic Growth of Gorontalo Province, because the Prob value of Investment is smaller than the Sig level. (0.01) so that H0 is accepted. Exports have a significant effect on the economic growth of Gorontalo Province, because the value of Prob from exports is smaller than the level of Sig. (0.01) so that H0 is accepted.

Simultaneous Test (f)

The F test is used to determine whether the independent variables jointly significantly affect the dependent variable. Based on Table 1, the p-value is less than the value of the significance level (α=0,01). This means that the independent variables jointly affect the dependent variable.

Multicollinearity Test

Multicollinearity Test Aims to test whether there is a high or perfect correlation between the independent variables contained in the regression model. A good regression model should not have a correlation between the independent variables.

Table 2. Multicollinearity Test

	INVEST	EKS
INVEST	1.000000	-0.821095
NetEKS	-0.821095	1.000000

Source : Output Eviews 9

From table 2 above, it can be seen that the value of the correlation coefficient between the independent variables is below 0.80, thus the data in this study does not have multicollinearity problems.

DISCUSSION

After testing the hypothesis and estimation on the model, it will be studied further on the effect of Investment and Export on the economic growth of Gorontalo Province. Below are the test results of each independent variable on the economic growth of Gorontalo Province in 2015-2019.

The Effect of Investment on the Economic Growth of Gorontalo Province in 2015-2019

Investment is defined as all expenditures on real capital goods. However, in everyday language investment also includes the purchase of assets. In general, investment spending is related to the management of existing resources to obtain future use or benefits. Nanga (Nanga, 2001) argues that investment is the company's overall expenditure which includes expenditures to purchase raw materials, machinery and factory equipment as well as all other capital equipment needed in the production process. In short, investment can be defined as a net addition to existing capital stock. Another term for investment is capital formation or capital accumulation. The test results show that the Investment variable has a positive and significant effect on the economic growth of Gorontalo Province, meaning that investment will significantly encourage economic growth. The results of this study are in accordance with the hypothesis which explains that the investment variable has a positive and significant effect on the economic growth of the province of Gorontalo.

It is said to be significant because investment is an indicator of economic growth as well as expenditures to purchase capital goods and production equipment with the aim of replacing and especially increasing capital goods in the economy that will be used to produce goods and services in the future. front. If the investment value is positive, then GRDP is positive, because to increase GRDP and expand business fields, increase national income and increase the level of community prosperity. The results of this study are relevant to the research (Karlita & Gunanto, 2013) which in his findings explains that investment has a significant and positive effect on the formation of the GRDP of the industrial sector of the city of Semarang, while labor and exports have no significant effect but have a positive effect on the GRDP of the industrial sector of the city of Semarang.

The Effect of Exports on the Economic Growth of Gorontalo Province in 2015-2019

Export has a very big role for the economy of a nation. According to mercantilism, to be rich a country must export more than it imports. For developing countries, exports can create job opportunities, generate foreign exchange that can be used to import various kinds of foreign products that have not been produced domestically. Foreign trade occurs because not all countries are unable to produce the goods and services they need. This form of foreign trade is export and import. Exports are goods and services that are produced domestically and purchased by foreigners. Another theory says that all goods and services produced and then sold to other countries / abroad can be counted as part of income because these activities generate income for the producing country.

Exports are economic expenditures that have a positive effect on the country's economic activities because they are expenditures by residents of other countries on goods produced domestically. The value of exports that have been reduced by the value of imports is called net exports. The test results show that the export variable has a positive and significant influence on the economic growth of Gorontalo Province, meaning that exports in Gorontalo Province can increase the value of economic growth significantly. The results of this study are in accordance with the hypothesis which explains that the export variable has a positive and significant impact on the economic growth of the province of Gorontalo. It is said to be significant because exports are an important factor in stimulating the economic growth of a region or a country. Exports will increase the consumption capacity of a country, increase world output, and provide access to scarce resources and potential international markets for various export products, without which poor countries will not be able to develop. activities and national economic life. The results of this study support research (Astuti & Ayuningtyas, 2018; Febiyansah, 2017; Fouad, 2005) where there is an effect of exports on economic growth, but contrary to the findings (Kalaitzi & Cleeve, 2017; Kim & Lin, 2009) who found that exports had a negative impact on economic growth.

CONCLUSION

Based on the results of the research and discussion above, the researchers describe the following conclusions: (1) Investment variables have a positive and significant impact on the GRDP of Gorontalo Province. This means that investment in the province of Gorotalo can significantly increase economic growth from 2015-2019. (2) The net export variable has a positive and significant impact on the GRDP of Gorontalo Province. This means that net exports in the province of Gorotalo can significantly increase economic growth from 2015-2019. (3) Investment and export variables simultaneously have an influence on the GRDP of Gorontalo Province.

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