European Journal of Research Development and Sustainability (EJRDS)
Available Online at: https://www.scholarzest.com
Vol. 3 No. 8, August 2022
ISSN: 2660-5570

ANALYSIS OF THE EFFECT OF INVESTMENT, GOVERNMENT CAPITAL EXPENDITURE, AND LABOR PRODUCTIVITY ON ECONOMIC GROWTH IN GORONTALO PROVINCE

Olistawati Ointu1
S1 Economic Development Study Program , Faculty of Economics, State University of Gorontalo
olisointu12@gmail.com
Boby Rantow Payu
S1 Economic Development Study Program , Faculty of Economics, State University of Gorontalo
bobchiel@ung.ac.id

Article history:

Received: 11th June 2022
Accepted: 11th July 2022
Published: 20th August 2022

Abstract:

To analyze how much influence investment, government capital expenditure and labor productivity have on economic growth in Gorontalo Province
The objective of this Research is to analyze the effect of investment, government capital expenditure, and labor productivity on economic growth in Gorontalo Province. The data used in this study are secondary data obtained from the statistics of Gorontalo Province and the Office of Investment, Energy and Mineral Resources, are five regencies and a city in a Gorontalo Province. It empolysa panel data multiple regression analysis with Fixed Model Effect (FEM) method.

The findings of this research indicate that (1) investment positively and isignificanly affects the economic growth in Gorontalo Province from 2015 to growth 2019, meaning that every one percent increase in investment can increase economic growth in Gorontalo Province. (2) Government capital expenditure negativly and insignificantly affect the economic growth in Gorontalo Province from 2015 to 2019, meaning that every one percent increase in government capital expenditure can decline the economic growth in Gorontalo Province. (3) Labor productivity negatively and significanly affects the economic growth in Gorontalo Province from 2015 to 2019, meaning that every one percent increase in labor productivity can decline the economic growth in Gorontalo Province.

Keywords: Investment, Government Capital Expenditure, Labor Productivity, Economic Growth.

INTRODUCTION

Economic growth is a condition of an increase in income that occurs due to an increase in production of goods and services. This increase is related to an increase in the population, and can be judged from the increase in output, increasingly developing technology, and innovation in the social sector.

According to Todaro and Smith (2006) economic growth is a process of increasing productive capacity in an economy continuously or continuously over time so as to produce higher levels of national income and output. The three components of economic growth that are important for any society are (1) the accumulation of capital, including all new investments in land, physical equipment and human resources through improvements in health, education and job skills, (2) growth in the population ultimately lead to the growth of the workforce, (3) technological advances which are broadly defined as new ways of getting work done (Anitasari and Soleh, 2015).

Economic growth is closely related to the process of increasing the production of goods and services in the community's economic activities. Economic growth is one of the most important indicators in analyzing economic development that occurs in a country or region. The economic growth of a region can be measured by Gross Regional Domestic Product (GRDP) based on constant prices for the current year and the previous year. Gross Regional Domestic Product is the total value added of goods and services generated from all economic activities in all regions within a certain year period, generally within one year (Central Bureau of Statistics).

Gorontalo Province is one area that has potential natural resources to be developed in order to support economic growth as a foreign exchange earner. Through this, local governments can increase economic growth activities in all sectors so that the community gets prosperity. Job opportunities or available job opportunities are one of the opportunities that the residents of Gorontalo Province can take advantage of to achieve this prosperity. The age of Gorontalo Province (will) enter two decades, one of the important indicators of progress to assess its development is economic growth (Arham, 2020). Economic development is an activity carried out by the Gorontalo City Government to improve the welfare of the community.

To create a rapidly growing economy in Gorontalo Province, development must be carried out, in addition to investment indicators as private investment in improving the economy. Capital expenditure is the role of the government as an economic regulator in accordance with the theory put forward by Rostow and Musgarve which connects the development of government spending with very large stages of economic development through a government investment with very large stages of economic development through the provision of infrastructure, public goods and services (Sanusi, 2004).

With the government's capital expenditures, it can increase infrastructure development, such as transportation facilities and other infrastructure that supports the productivity and welfare of the people. Assuming that in the future all spending will be oriented to each region, where the development of a country is regional development to form capital or capital that is getting bigger in each region. this can be seen from the value of capital expenditures.

Another factor that determines economic growth is labor productivity. Traditionally it can be said that the growth of population and labor force is a good impact from referring to population growth so large it can be interpreted as the size of the domestic market is also larger. The number of the working force is how the description of field conditions where jobs are still available (Todaro, 2004).

Table 1.1
Economic Growth Rate and Private Investment Value, Government Capital Expenditure, and Labor Productivity of Gorontalo Province in 2015-2019

Year	Growth Economy (%)	Private Investment (Rp)	Government Capital Expenditure (Rp)	Workforce
2015	6,22	714.192.288.466	973.407.753	493 687
2016	6,52	1.794.294.798.233	1.241.644.762	546 668
2017	6,73	3,671,692,942,302	975.411.393	524 316
2018	6,79	4.234.052.887.133	1.052.689.238	555 533
2019	6,40	5.742.787.663.058	1.152.363.891	562 087

Source: Gorontalo Provincial Bps and Gorontalo Provincial Investment Office

Based on table 1.1 above, the economic growth in Gorontalo Province during the research period, namely from 2015-2019 fluctuated. It can also be seen that when investment, government capital expenditures, and labor productivity increase, they can indirectly encourage economic growth. Vice versa, when investment, government capital expenditure and labor productivity decline, it will indirectly result in a decline in economic growth conditions. Government investment and capital expenditures which indicate an increasing multiplier effect in production capacity which will increase then affect the resulting output on economic growth. Increased production capacity is strongly influenced by the quality of the workforce as measured by labor productivity related to economic growth.
Based on the background of the research above, the authors are interested in conducting research to find out further what factors influence economic growth in Gorontalo Province. Therefore, the title is taken **"Analysis of the Effect of Investment, Government Capital Expenditure, and Labor Productivity and on Economic Growth in Gorontalo Province"**

2.MATERIALS AND METHODS

2.1 Theory Study

2.1.1 Economic Growth

Economic growth can be interpreted as the development of activities in the economy which causes the goods and services produced in the community to increase and the prosperity of the community to increase (Sukirno, 2011). So economic growth measures the achievement of the development of an economy. From one period to another the ability of a country to produce goods and services will increase. This increased ability is caused by the addition of production factors both in quantity and quality. Investment will increase goods and capital and the technology used is also growing. In addition, the workforce increases as a result of population development along with the increase in their education and skills (Suastyaone, 2014).

2.1.2 Invesment

Investment can be defined as the expenditure or expenditure of investments or companies to buy capital goods and production equipment to increase the ability to produce goods available in the economy. Economic theory defines investment as expenditures to buy capital 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 (Sukirno, 2011)

2.1.3 Government Capital Expenditure

Capital expenditures are local government expenditures whose benefits exceed one budget and will increase regional assets or wealth and will further increase routine expenditures such as maintenance costs for the general administration group. This expenditure group includes the type of expenditure for both the regional apparatus and public services (Mardiasmo, 2009).

2.1.4 Labor Productivity

According to Tohardi in Sutrisno (2017), work productivity is a mental attitude. A mental attitude that is always looking for improvements to what already exists. A belief that one can do a better job today than yesterday and tomorrow better than today.

Meanwhile, according to Hasibuan (2018), productivity is a comparison between output (results) and inputs (input). If productivity increases, it will increase efficiency (time-material-labor) and work systems, production techniques and an increase in the skills of the workforce.

METHODS

The approach in this study uses a quantitative research approach using the panel data method. Quantitative method is a statistical method that deals with parameter estimation, testing, hypotheses, and the relationship between two or more properties (variables) for parameters that have a certain known normal distribution. In the research, the data used are secondary data, what is meant by secondary data is data obtained based on information that has been compiled and published by certain agencies. The data sources used in this research are documents in government institutions such as the Central Statistics Agency, and other agencies that discuss issues, economic journals and reference books on investment, government capital expenditures, and labor productivity, and economic growth.

The analysis used in this research is quantitative by using regression model estimation using panel data. Regression analysis is an analysis used to determine which relationship statistically affects the dependent variable. To see the relationship between private investment, government capital expenditure, labor productivity, and economic growth, the following model is used.

$Yit = \beta0 + \beta1 \, Log(Iit) + \beta2 \, Log(BMit) + \beta3(PTK)it + \varepsilon it$

Where:
Y = Economic Growth
0 = Constant
1, 2, 3 = Regression Coefficient
I = Investment (Rp)
BM = Government Capital Expenditure (Rp)
CAR = Labor Productivity (Rp/Tk)
Eit = Error terms
i = Gorontalo Province
t = Period 2015-2019

3.RESULTS AND DISCUSSIO

3.1 Regression Results

We will perform multiple regression testing:

Table 4.6

Panel Data Regression Results

Variable	Coefficient	Std. Error	Prob.
C	10.07074	4.687088	0.0435
LOG(I?)	0.064797	0.050511	0.2135
LOG(BM?)	-0.182563	0.233613	0.4432
PTK?	-5.808005	3.232805	0.0868
Fixed Effects (Cross)			
KAB_BOALEMO—C	-0.118182		
KAB_GORONTALO--C	-1.176306		
KAB_POHUWATO--C	0.323176		
KAB_BONBOL—C	-0.183882		
KAB_GORUT—C	0.823606		
KOTA_GORONTALO--C	0.331588		

R-squared	0.713022	Durbin-Watson stat	1.943581
Adjusted R-squared	0.603697		
F-statistic	6.522044		
Prob(F-statistic)	0.000265		

Source: Processed Products,(2022)

he interpretation of the results of the regression analysis above is as follows:

1. Economic growth, without being influenced by any variables, the rate of economic growth will remain constant at the value of 10.07074 percent
2. Investment has a positive but not significant effect on economic growth. So every 1 percent increase in investment will increase economic growth by 0.064797 percent.
3. Capital Expenditures have a negative but not significant effect on economic growth. So every one percent increase in the value of capital expenditure will reduce economic growth by 0.182563 but has no significant effect.
4. Labor Productivity has a negative but significant effect on economic growth. So every 1 percent increase in labor productivity will reduce economic growth by 5.808005 and have a significant effect of 10 percent.

As for looking at the contribution of the Regency/City to Economic Growth in Gorontalo Province, it can be seen from the Fixed results below:

Based on the results of the fixed effect model analysis, from 5 (five) regencies and 1 (one) city in Gorontalo Province, it can be seen that there are 3 regencies that have intercept values below the average, including; Gorontalo Regency, Boaelemo Regency, and Bone Bolango Regency. This means that if the independent variable is assumed to be constant, it will reduce the economic growth variable by 1.17 percent for Gorontalo Regency, and so on. Meanwhile, the intercepts for areas that have coefficients above the average consist of North Gorontalo Regency and Gorontalo City. This means that with the assumption that the independent variables are constant, economic growth in North Gorontalo Regency will increase by 0.33 percent, and the same thing happens in Gorontalo City which increases by a value of 0.82 percent.

3.2 RESULT DISCUSSION

Investment is one of the most important factors in the economic growth of a country or a region. The more the amount of investment in a country/region, it is certain that its economic growth can also increase. The regression estimation results of the economic growth equation show that the investment variable has a positive but not significant effect on economic growth, with the elasticity coefficient value of 0.064797 which means that an increase in investment of 1 percent will increase the amount of economic growth by 0.064797 percent. An increase in investment will trigger an increase in economic growth because investment indicates an increase in investment or capital formation. An increase in investment or capital formation will have an impact on the production of goods and services in the economy. This increase in goods and services will lead to an increase in economic growth. On the other hand, if there is a decline in investment, GDP will also decrease because investment indicates a decline in investment or capital formation. A decrease in investment or capital formation will result in a decrease in the production of goods and services. A decrease in goods and services will lead to a decrease in economic growth. The findings of this study are in line with the opinion of Harrod Damor which states that in supporting economic growth, new investments are needed as capital stock. The more savings that are then invested, the faster economic growth occurs. In addition, it also supports the results of a study conducted by Wulansari (2017) which suggests that investment has a positive but not significant effect on economic growth in the Basuki Residency EKS. Research that also supports the results of this estimate is the research conducted by Munzir AG, Mohd, Nur Syecholad, Vivi Silvia (2017) which suggests that investment has a positive effect on economic growth.

The results of the regression estimation of the economic growth equation show that the value of the elasticity coefficient for the capital expenditure variable is -0.182563, which means that any increase in the ratio of government spending to capital expenditures to total development by one percent will be responded to by a decrease in economic growth of 0.182563 percent. However, the effect is not significant. This shows that the total budget for capital expenditures has not fully encouraged economic growth, this is because a large amount of the budget is spent but not on developments that can encourage economic growth. This research is in line with research conducted by Wulansari (2017) where the results of the study show that capital expenditure has a negative and significant effect on economic growth in the former Besuki Residency area. This is because although the government's role in spending allocation is carried out effectively and efficiently, there are still many regions which is not yet optimal for implementing public facilities so that it does not encourage the level of population productivity and per capita income to decrease.

The results of the regression estimation of the economic growth equation show that labor productivity has a negative and significant effect with an elasticity coefficient of -5.808005. Thus, every one percent increase in labor productivity can reduce economic growth by 5.808005 percent. Labor productivity has a negative effect on economic growth in Gorontalo Province, this means that an increase in the number of workers causes a decrease in economic growth in Gorontalo Province. This is due to an increase in the number of workers which is not followed by an increase in the quality of its human resources which will result in wastage of inputs, causing less and less output to be produced which has an impact on decreasing economic growth. This finding is in accordance with the opinion expressed by Todaro

(2004:93-99) which states that the increase in the labor force does not affect the increase in output but depends on the ability of the economic system concerned to absorb and productively utilize the increase in labor.

REFERENCES

1. Abburrachman, A. (2010). *Ensiklopedi Ekonomi Perdagangan*. Pradnya Paramita.
2. Ardhani, pungky. (2011). *Pengaruh Pertumbuhan Ekonomi, Pendapatan Asli Daerah, Dana Alokasi Umum dan Dana Alokasi Khusus Terhadap Pengalokasian Anggaran Belanja Modal Pada Pemerintah di Kabupaten/ kota di Jawa.* Universitas Di Ponegoro.
3. Arham, M. A. (2020). *Perekonomian Gorontalo: Perkembangan, Agenda Dan Tantangan Ke Depan*. https://books.google.co.id/books?hl=id&lr=&id=_G0PEAAAQBAJ&oi=fnd&pg=PP1&dq=bentor+gorontalo+and+covid&ots=bLFunj5GHC&sig=F392W3eGufkW8kZg_NUbJNC71Is&redir_esc=y#v=onepage&q=bentor gorontalo and covid&f=false
4. Badan Pusat Satistik. (n.d.). Produk Domestik Regional Bruto. In *Bps provinsi Gorontalo*.
5. Lincolin, A. (1998). *Ekonomi Pembangunan*. STIE YKPN.
6. Mardiasmo. (2009). *Akuntasi Sektor Publik*. Andi.
7. Rofii;, A. M., & Ardyan, P. S. (2017). Analisis Pengaruh Inflasi, Penanaman Modal Asing (Pma) Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Di Jawa Timur. *Jurnal Ekonomi & Bisnis*, *2*(1), 303–316.
8. Sanusi, B. (2004). *Pengantar Ekonomi Pembangunan*. Rineka Cipta.
9. Simanjuntak, P. J. (2001). *Pengantar Ekonomi Sumber Daya Manusia*. Fakultas Ekonomi Universitas Indonesia.
10. Suastyaone, B. (2014). Analisis Pertumbuhan Ekonomi dan Faktor Yang Mempengaruhinya (Investasi, Tenaga Kerja, Inflasi, dan Pengeluaran Pemerintah) di Jawa Timur Tahun 1995-2015. In *Paper Knowledge . Toward a Media History of Documents*.
11. Subandi. (2016). *Ekonomi Pembangunan*. Alfabeta.
12. Sugiyono. (2018). *Metode Kualitatif dan Kuantitatif*.
13. Sukirno, S. (2001). *Pengantar Teori Makroekonomi*. Raja Grafindo Per.
14. Sukirno, S. (2011). *Ekonomi Pembangunan : Proses, Masalah, dan Dasar Kebijakan*. Kencana.
15. Sumual, T. E. M. (2017). *Manajemen Sumber Daya Manusia* (Revisi). CV R.A.De Rozarie.
16. Suryana. (2000). *Ekonomi Pembangunan*. Salemba 4.
17. Todaro, M. (2004). *Pembangunan Ekonomi* (Edisi Kede). Erlanggaa
18. Wulansari, N. B. (2017). *Analisis Pengaruh Investasi swasta, Belanja Modal,Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Di Eks Karesidenan Besuki*.