



FACTORS THAT AFFECT DISTRICT/CITY LOCAL REVENUE IN GORONTALO PROVINCE

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Abstract:

This research aimed to determine

To find out the effect of ADHK's GRDP on Regional Original Income in Gorontalo Province?

To find out the effect of Population on Regional Original Income in Gorontalo Province?

To find out the effect of ADHK's GRDP, Total Population Simultaneously on Regional Original Income in Gorontalo Province?

The objective of this study was to determine to what extent the effect of Gross Regional Domestic Product and Total Population on regional revenue in Gorontalo Province. The data used in this study were secondary data from five regencies and a city during the ten-year implementation period, namely from 2011 to 2020, sourced from the Statistics of Gorontalo Province. Besides, it employed multiple regression analysis using panel data.

The analysis result revealed that the Gross Regional Domestic Product positively and significantly affects the regional original revenue. This meant that every increase in the regional original revenue of Regencies/City in Gorontalo Province. Likewise, total population positively and significantly affected the regional original revenue. This meant that every increase in population did not necessarily effect the increase in the regional original revenue of Regencies/City in Gorontalo Province.

Keywords: Regional Original Revenue, Gross Regional Domestic Product at Constant Prices, Total Population

1. INTRODUCTION

The contribution of PAD to the APBD structure must always be increased to achieve regional capacity and independence and strengthen the regional revenue structure. This is because it is one of the performance benchmarks and reflects regional independence. Minimum PAD detection is not yet considered a disability and needs serious attention from local governments to improve public services and facilities. In fact, the effective and efficient goal of meeting the needs of the community has not been achieved so far, this is one of the root causes of the non-achievement of Regional Original Income.

This is because PAD is the main source of regional income and can carry out development with local governments as needed to minimize dependence on the use of central government funds. So far, the potential for local revenue has not been explored in general due to the lack of sensitivity of local governments in seeking cultural benefits and the potential for local revenue (PAD). In particular, the PAD of Gorontalo Province did not increase significantly compared to the previous year.

Table 1

Locally-generated Revenue (Milliar Rupiah) Year 2011-2020

Year	Locally-generated Revenue (Milliar Rupiah)					
	Region Se Province					
	Kab Boalemo	Kab Gorontalo	Kab Pohuwato	Kab Bone Bolango	Kab Gorontalo Utara	Kota Gorontalo
2011	14,577,060,000	18,247,530,798	17,440,767,160	8,610,000,000	8,690,000,000	74,690,000,000
2012	23,505,680,000	26,864,078,372	18,912,194,624	15,950,000,000	9,360,000,000	84,350,000,000
2013	18,229,550,000	60,166,455,190	36,432,512,200	20,750,000,000	10,880,000,000	97,090,000,000
2014	37,352,460,000	105,365,567,590	38,888,554,940	44,670,000,000	20,958,450,360	124,720,000,000
2015	23,986,770,000	113,221,503,040	46,935,267,850	54,409,026,950	18,838,178,780	142,090,000,000
2016	48,794,270,000	125,271,076,530	62,981,898,280	62,079,454,189	24,586,696,146	172,320,000,000
2017	71,687,170,000	190,428,308,122	70,484,879,780	86,197,832,174	45,276,458,248	182,880,000,000
2018	56,091,131,871	147,992,401,409	60,361,827,340	65,100,000,000	27,302,685,270	193,670,000,000
2019	70,712,731,016	155,401,462,616	62,361,827,030	75,760,000,000	32,056,965,027	197,180,000,000
2020	37,525,055,649	128,102,514,698	50,529,397,520	76,010,000,000	24,048,929,760	213,810,000,000

Source: BPS Provinsi Gorontalo, 2021

The picture above explains that the Regional Original Revenue between 2011-2020 for the regions of Gorontalo Province, Gorontalo Regency/City. The data above shows that in Boalemo Regency there are ups and downs of PAD or there have been fluctuations every year, other from Boalemo Regency, Gorontalo Regency from 2011-2019 it has increased every year, but in 2020 PAD in Gorontalo Regency also decreased to 128,102,514,698. Whereas in Pohuwato Regency in 2011-2017 there was an increase in PAD every year but not in 2018-2020 there were fluctuations with the lowest PAD generated in 2011 of 17,440,767,160. Then in Bone Bolango Regency in 2011-2017 also experienced an increase in PAD every year, but in 2018 PAD experienced a decrease in income of 65,100,000,000 and in 2019-2020 PAD in Bone Bolango Regency experienced an increase in income of 76,010,000,000. In North Gorontalo Regency, it is different from Bone Bolango Regency, namely, in North Gorontalo Regency in 2011-2014 the PAD increased by 20,958,450,360 but in 2015 Regional Original Income decreased the amount of income to 18,838,178,780 on the other hand, in 2016-2020 or in the last four years PAD in North Gorontalo Regency has fluctuated. Meanwhile, in 2011-2020 in Gorontalo City, PAD experienced an increase in income every year.

Based on the problems above, the researcher is interested in raising this issue to be used as a scientific paper with the title: "Factors that affect Regency/City Original Revenue in Gorontalo Province".

2. MATERIALS AND METHODS

2.1 Theory Study

2.1.1 Locally-generated Revenue

Regional Original Revenue is a set of territorial rights that are recognized together with net worth during the period when the exclusivity rule applies. The initial regional income is based on Article 157 a of Law No. 32 of 2004 on the Regional Government discourse indicating that the regional government in managing its own household needs to be given sources of income or regional financial revenues to fund all activities in the context of implementing state functions and development for the benefit of the people. people fairly and equitably. Its components come from tax revenues, regional revenues, the results of the management of separated regional assets, and other legitimate PAD. The four components of PAD are also sources of regional finance.

2.1.2. Gross Regional Domestic Product (GRDP)

Gross Domestic Product (GDP) is one of the general macroeconomic indicators used to measure a country's economic performance. Meanwhile, at the regional, provincial and district/city levels, Gross Regional Domestic Product (GRDP) is used. GRDP is the total gross value added of all economic sectors in the region. Development in an area can be successful if it is supported by a solid plan as the basis for strategic identification, decision making and assessment of the consequences of the development that has been carried out. Haryono 2004 (in Arief Eka Atmaja 2011).

2.1.3. Total population

Population is the number of people who live in an area and are legally allowed to live in that area or who are officially registered to live in that area. Meanwhile, according to the Central Statistics Agency (2015), population is all people who live in a geographical area for 6 months with the aim of living expansion, both in the domestic and foreign markets.

According to Sukirno (2005) population can affect regional income. The larger the population, the greater the demand for consumer goods, the "economy of scale" of production is encouraged, thereby reducing production costs, which can lead to an increase in output, which leads to the expansion of the manufacturing scale, the struggle and the formation of new struggles in the production sector will increase the labor force and thus people's income will tend to increase.

3. RESULTS AND DISCUSSIO

3.1 Regression Analysis Results

Table 2 Regression Analysis Results

Dependent Variable: LOG(PAD?)

Method: Pooled Least Squares

Total pool (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-43.37201	12.35603	-3.510191	0.0009
LOG(PDRBAK?)	2.707154	0.415563	6.514418	0.0000
LOG(JP?)	0.050913	1.532834	0.033215	0.9736
Fixed Effects (Cross)				
_BOALEMO—C	0.605299			
_KABGOR—C	-1.058345			
_KABPOHUWATO—C	0.040488			
_KABBONBOL—C	1.049210			
_KABGORUT—C	1.179169			
_KOTGOR—C	-1.815821			
R-squared	0.874396	Mean dependent var	10.42405	
Adjusted R-squared	0.857488	S.D. dependent var	0.832436	
F-statistic	51.71427	Durbin-Watson stat	1.051802	
Prob(F-statistic)	0.000000			

Sumber: Hasil Pengolahan, 2022 (Lampiran)

The interpretation of the estimation variable model above can be described as follows:

1. If the influence of all independent variables (PDRB ADHK, total population) is ignored, then the average PAD in the observed area during 2011-2020 will reach -43,372.
2. ADHK's GRDP has a positive effect on Regional Original Income. An increase in ADHK's GRDP by 1 percent will increase Regional Original Income by 2.707%.
3. The number of residents has a positive effect on Regional Original Income. An increase in population by 1 percent will increase Local Original Income by 0.050%.

Table 3
Coefficient Regresi Kabupaten/Kota di Provinsi Gorontalo

No	Fixed Effect (Cross)	Coefficient
1	_BOALEMO—C	0.605299
2	_KABGOR—C	-1.058.345
3	_KABPOHUWATO—C	0.040488
4	_KABBONBOL—C	1.049.210
5	_KABGORUT—C	1.179.169
6	_KOTGOR—C	-1.815.821

Source: Data processing results, 2022 (Appendix)

Based on the estimation results of the Fixed Effect model from 5 regencies and 1 city in Gorontalo Province, the areas that experienced positive growth were Boalemo Regency, Pohuwato Regency, Bone Bolango Regency, North Gorontalo Regency. While the negative effect is Gorontalo Regency and Gorontalo City.

3.2. Coefficient of Determination Testing (R-square)

The results of the analysis show that the R-square value (coefficient of determination) is 0.874396, meaning that the variance of 87.43 percent of the Regional Original Income in the observed period can be explained by the ADHK GRDP variable, Total Population, the rest is influenced by other variables outside of this study.

3.3. Simultaneous Testing (F-test)

In testing the suitability of the model to conclude whether together the independent variables can describe the relationship of the dependent variable, the F test is carried out. From the results of data processing, the p-value is 0.000000, the p-value < 0.05 . It can be concluded that 51.71427 (F count) > 3.159 (F table) then H_0 is rejected and H_1 is accepted. It is concluded that the ADHK GRDP and Total Population variables together (simultaneously) have a significant effect on Regional Original Income.

3.4. Partial Regression Coefficient Test (T Test)

The test results have a significant effect on each variable on the observed Regional Original Income as follows:

1. Testing the Effect of Gross Regional Domestic Product at Constant Prices (PDRB ADHK) on Regional Original Income. From the results of the analysis, it is known that the coefficient value for the ADHK GRDP variable is 2.707154 with a probability of 0.0000. It can be concluded that 6.514418 (T count) > 2.660283 (T table) then H_0 is rejected and H_1 is accepted. When compared with p-value (0.000) $<$ alpha value (0.05), the p-value is smaller so H_0 is rejected and H_1 is accepted. Thus, it is concluded that ADHK's GRDP has a positive and significant effect on Regional Original Income.

2. Testing the effect of Population on Regional Original Income.

From the results of the analysis, it is known that the coefficient value for the population variable is 0.050913 with a probability of 0.9736. It can be concluded that 0.033215 (T count) < 2.660283 (T table) then H_0 is accepted and H_1 is rejected. When compared with the p-value $0.9736 >$ alpha value (0.05) so that H_0 and H_1 are accepted. Thus, it is concluded that the population has no significant effect on Regional Original Income.

Based on table 1 previously explained that:

a. The Influence of Gross Regional Domestic Product at Constant Prices (PDRB ADHK) on Local Revenue (PAD) of Gorontalo Province

From the results of the above analysis which states that ADHK's GRDP has a positive and significant effect on Regional Original Income. This means that every increase in the provincial ADHK GRDP will increase PAD. ADHK's high GRDP can be seen from the real economic growth from year to year. One of the factors that influence PAD is the quality of ADHK's GDP.

According to Djojohadikusumo, that national economic growth and regional economic growth focus on the process of increasing the production of goods and services in community economic activities. Economic growth is defined as an increase in Gross Domestic Product or Gross Regional Domestic Product (GDP/GRDP) regardless of whether the increase is greater or less than the rate of population growth and whether changes in the economic structure take place or not.

In the theory above, it shows that ADHK's GRDP does have a significant effect on Regional Original Revenue. In accordance with the results in this study, it says that ADHK's GRDP has a significant effect on Regency/City Original Revenue in Gorontalo Province. Gorontalo Province which consists of 5 regencies and 1 city has different ADHK GRDP values in terms of increasing and decreasing. This is evidenced by data taken from the Central Statistics Agency (BPS) of Gorontalo Province on the value of the district/city.

b. Effect of Population on Original Regional Revenue of Gorontalo Province

The results of the analysis show that the variable population has a positive but not significant effect. This means that every increase in population does not necessarily affect the increase in Regency/City Original Income in Gorontalo Province.

According to Suwarno et al. (2005), supported by empirical evidence, high population growth will increase output through high population growth, which will increase output through increasing levels and market expansion, both domestic and foreign markets. High population growth accompanied by technological changes will encourage savings and also economies of scale in production.

Population increase is something that is needed and not a problem, but as an important element that can spur economic development and growth. The amount of income can be influenced by the population. If the population increases, the income that can be withdrawn also increases.

The results of this study are in accordance with Hijri Juliansyah's research (2018) where partially the population is not significant to PAD in Simeulue Regency, then H_0 is accepted and H_1 is rejected, meaning that there is not necessarily a relationship between the Population Number variable and the PAD variable.

3.5. Classic Assumption Test: Multicollinearity Test

In this study to see whether or not there are symptoms of multicollinearity between independent variables using the Vector Inflation Factor (VIF) method. The VIF model takes into account the value of the VIF Tolerance if the value of VIF < 10 then there is no multicollinearity symptom in the model, while VIF $> 10 < 30$ then it can be concluded that there is a high multicollinearity problem.

Table 4 Multicolinearitas VIF-Test

Variance Inflation Factors
Date: 04/12/22 Time: 10:53
Sample: 2011 2020
Included observations: 10

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	234.2867	35104.83	NA
LOG(PDRBAK)	0.744452	42161.15	3.563834
LOG(JP)	5.019316	106743.1	3.563834

Source: Data processing results, 2022 (Appendix)

The results of the above test show that the value of Centered VIF is when the independent variable is < 10 , so that in this model there is no multicollinearity between the independent variables.

Heteroscedasticity Test

Heteroscedasticity will appear if the confounding variable has a different variant from one observation to another. If the variance does not change then it is called Homoscedasticity and if not it is called heteroscedasticity.

Table 5 Heteroscedasticity Test

Dependent Variable: RESABS
Method: Panel Least Squares
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.423493	0.936714	0.452105	0.6529
LOG(PDRBAK)	-0.159190	0.101921	-1.561900	0.1238
LOG(JP)	0.243569	0.128160	1.900511	0.0624

Source: Data processing results, 2022 (Appendix)

Based on the results in table 4, the probability value of all independent variables is greater than 0.01 (> 0.01), so it can be concluded that there is no heteroscedasticity.

4. CONCLUSION

Based on the results and discussions that have been described in the previous chapter regarding the Factors Affecting Regional Original Income, the researchers can draw conclusions, including:

1. Gross Regional Domestic Product on the basis of Constant Prices (PDRB ADHK) during the period 2011-2020 has a positive and significant impact on Regional Original Income (PAD) in districts/cities in Gorontalo Province. This means that every increase in ADHK's GRDP is able to increase Regency/City Original Revenue (PAD) in Gorontalo Province.
2. The total population during the period 2011-2020 has a positive but not significant effect on Regional Original Income (PAD). This means that every increase in population does not affect the increase in PAD in regencies/cities in Gorontalo Province.
3. From the results of statistical testing, it can be concluded that simultaneously both variables (PDRB ADHK, Total Population) have a positive effect on Regional Original Income (PAD) in regencies/cities in Gorontalo Province by 87.43 percent.

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