

The Effect of the Number of Population and Gross Domestic Regional Product (GDRP) on Regional Original Revenue (PAD) in The Regency/City of West Java Province, Indonesia

Yudi Sutrasna^A, Junindra Duha^B

Abstract

The economic growth of a region is a gradual economic change towards a better state. The economy can be said to be undergoing development if economic activity progresses from each subsequent year. Regions whose economy gives positive results will allow an increase in Regional Original Revenue (PAD), economic development can be calculated using GRDP, GRDP is used to prove the work of the regional economy. Gross Regional Domestic Product (GDRP) and its derivative aggregates are presented using a constant price basis. It is said to be a constant price because the valuation used is based on the price of a certain base year. Then in this study will analyze the Effect of Gross Regional Domestic Product (GRDP) on Regional Original Revenue (PAD) in the Regency/City of West Java Province. by looking at the influence of the total population on Original Local Government Revenue (PAD) in the regency/city of West Java province, the effect of the gross regional domestic product (GRDP) on the Regional Original Revenue (PAD) in the regency/city of West Java province, and the influence of the population and Regional Original Revenue (PAD) together with Regional Original Revenue (PAD) in the Regency/City of West Java Province. The data analysis method used is multiple linear regression analysis method with the help of SPSS for windows software. The results showed that the population had a positive effect on Regional Original Revenue (PAD), Gross Regional Domestic Product (GDRP) had no effect on Regional Original Revenue (PAD), the total population and Gross Regional Domestic Product (GDRP) together had an effect on the dependent variable, namely Regional Original Revenue (PAD).

Keywords: *Total Population, Gross Regional Domestic Product (GDRP), Regional Original Revenue (PAD).*

INTRODUCTION

Based on the Law of the Republic of Indonesia Number 33 of 2004 concerning the Central Government and Regional Governments. Regional Original Revenue (PAD) includes regional taxes, regional levies, results of regional wealth management, and other legitimate income. Economic resources in the area must be managed properly and responsibly, which means the results must be maximized to increase economic growth and generate income and independence for the region.

^ADefense Economics, Defense Management Faculty, The Republic of Indonesia Defense University, Jakarta, Indonesia

^BDefense Economics, Defense Management Faculty, The Republic of Indonesia Defense University, Jakarta, Indonesia, Email: juninduha@gmail.com

The regional income sector plays an important role very important, because through this sector it can be seen to what extent an area can finance government activities and regional development (Baldrice, 2015) (Santosa & Rahayu, 2005).

Regional Original Revenue (PAD) is said to be good to meet development financing region if the achievement of the percentage exceeds 70% of the total Regional Original Revenue (PAD) (Firdausy, 2018). Based on the theory of government spending which explains that government spending on various development activities will increase aggregate expenditure and increase the level of the country's economic activity (Sukirno, 2006). then if it is associated with local government spending which is reflected in the realization of Regional Revenues and Expenditures Budget, the greater the regional government expenditure, the greater also its impact on the regional economy (Darise, 2006) (Sari, 2013; Utama & Suartini, 2013; Weley et al., 2019).

West Java Province is one of the many regions in the territory of Indonesia that have strategic capabilities for independence regional finance. West Java's economy is experiencing rapid development fast. Based on data from the Indonesian Central Statistics Agency (BPS RI), total gross regional domestic product (GRDP) of West Java in 2020 reached Rp1,962 trillion.

Table 1. Total Population, GRDP and Regional Original Revenue (PAD) of West Java Province Regency/City in 2020

Regency/City	Total Population	GRDP	Regional Original Revenue (PAD)
Bogor	6088233	25,310,591.99	6,789,030,535.00
Sukabumi	2470219	18,702,513.57	3,998,482,445.06
Cianjur	2264328	14,039,069.25	3,666,381,720.82
Bandung	3831505	21,095,968.71	4,418,054,901.00
Garut	2636637	14,639,157.88	5,966,161,115.89
Tasikmalaya	1755710	13,866,961.30	3,613,699,744.00
Ciamis	1201685	18,283,002.94	2,454,873,539.19
Kuningan	1087105	15,526,975.77	2,656,253,030.00
Cirebon	2209633	15,072,409.88	3,579,590,688.00
Majalengka	1210709	17,953,616.37	3,617,076,218.08
Sumedang	1154428	20,499,335.30	2,821,541,240.00
Indramayu	1737624	34,069,512.34	3,352,169,432.00
Subang	1612576	17,519,828.26	3,006,749,960.00
Purwakarta	971889	46,643,853.89	2,322,179,013.25
Karawang	2370488	66,589,465.44	4,278,401,049.04
Bekasi	3899017	62,373,478.74	5,480,491,525.50
Bandung Barat	1714982	17,866,315.49	2,953,618,110.30
Pangandaran	401493	19,275,474.89	1,317,818,114.62
Kota Bogor	1126927	28,469,912.41	2,434,344,617.19
Kota Sukabumi	330691	25,803,658.11	1,304,292,628.00
Kota Bandung	2510103	76,947,023.29	7,117,204,956.96
Kota Cirebon	322322	51,641,318.63	1,770,976,049.90
Kota Bekasi	3075690	21,991,181.97	6,179,273,880.71
Kota Depok	2484186	19,375,401.90	3,083,042,116.96

Kota Cimahi	620393	36,010,338.19	1,481,834,265.33
Kota Tasikmalaya	663986	23,238,470.76	1,671,546,640.00
Kota Banjar	183299	17,757,544.45	813,004,804.83

Source: BPS, 2020

LITERATURE REVIEW

Gross Regional Domestic Product (GRDP) is a picture of the overall economy in the region (Adejarea & Akandeb, 2018; Adriani & Handayani, 2017). Domestic Gross Regional Domestic Product (GRDP) has a direct impact on revenue generation area. With the increase in Gross Regional Domestic Product (GRDP), it will increase government revenue areas that can be used to finance government programs or development of facilities and infrastructure, so as to improve services to community which is expected to increase their productivity. Gross Regional Domestic Product (GRDP) is the value of all goods and services produced within one year in a certain area without distinction ownership of factors of production, but rather requires the presence of factors of production that are used in the production process, Gross Regional Domestic Product (GRDP) is a reflection of economic progress of a region. The increase in Gross Regional Domestic Product (GRDP) will cause regional income from the tax and levy sector increased. This has an impact on increasing Regional Original Revenue (PAD) in the area, one way to see economic progress is to observing the value of Gross Regional Domestic Product (GRDP) growth. Economic growth is measured by the value of Gross Regional Domestic Product (GRDP) at constant prices, because the value of Gross Regional Domestic Product (GRDP) is not affected by changes price, so that the change obtained is a real change that does not influenced by price fluctuations (Asmuruf, 2015) (Kusuma & Wirawati, 2013; Murib, 2018; Prana, 2019; Sahrudin, 2017). The existence of a stabilizing pattern of growth is always related to the government increasing spending on economic affairs rather than other functions, government spending is financed by current income; and it is a temporary measure to stabilize growth. Moreover, it shows that stabilizing growth by increasing government spending is a global phenomenon (Lyu et al., 2018).

Likewise with the population (Hertanto & Sriyana, 2011) explain that the population at a moderate level is basically positive and beneficial for economic development for both developed and developing countries. The more the more people, the more people who have talent and creative ideas in technological development of experts with increasing population affect local revenue receipts for goods or services. Growth Population is one thing that is needed and not a problem but an important element that can spur development and economic growth. Increasing the number of people who have productive abilities can certainly develop production activities in the region, it can increase the expansion of the existence of new industrial businesses in the production sector (Duha & Saputro, 2022). With the opening of new businesses, it will certainly open up more job opportunities will have an impact on the surrounding community and will even open up

opportunities for an increase in Regional Original Revenue in an area (Allers et al., 2001; Asari & Suardana, 2018; Indriani et al., 2020; Kurniawan, 2019).

A similar previous study was conducted by Hijri Juliansyah and Sulkadria in 2018 with the title The Effect of Total Population and Gross Regional Domestic Product (GRDP) on Simuelue Regency's Original Regional Revenue (PAD). In this study, researchers can conclude that Gross Regional Domestic Product (GRDP) has a partial effect on Regional Original Revenue (PAD) in Simuelue Regency (Juliansyah, 2018).

Then in addition, Ryan Perwira & Vitayanti Fatlah carried out in 2018 with the title The Effect of Gross Regional Domestic Product (GRDP), Development Expenditures and Productive Populations on Regional Original Revenue (PAD) in Regencies/Cities in South Sulawesi. In this study, researchers can conclude that Gross Regional Domestic Product (GRDP) has a positive and significant effect on Regional Original Revenue (PAD) in Central Sulawesi, based on the proven t-test results (Perwira, 2018).

Furthermore, research conducted by Afifah Ariyanti, Fitri Yetti, and Noegrahini Lastiningsih in 2018 with the title The Effect of Gross Regional Domestic Product (GRDP), Population and Hotel Taxes on Regional Original Revenue (PAD). This study concludes that gross regional domestic product, population and hotel taxes have a significant positive effect on Regional Original Revenue (PAD) (Ariyani et al., 2018).

Subsequent research was carried out by Idham Nur Iman, Ima Amaliah and Meidy Haviz in 2019 with the title The Effect of Population, Gross Regional Domestic Product (GRDP), and Regional Expenditures on Regional Original Revenue (PAD) in Bandung Regency in 2000-2017. In this study, researchers can conclude that Gross Regional Domestic Product (GRDP) partially has a significant and elastic effect on Regional Original Revenue (PAD) in Bandung Regency (Iman et al., 2019).

Which was then carried out by Muslim, Mallongi, & Rahman (2019) with the title The Effect of Gross Regional Domestic Product (GRDP), Population and Inflation Rates on Kendari City's Regional Original Revenue (PAD). In this study, it can be concluded that the results of data processing show that Gross Regional Domestic Product (GRDP) does not have a significant effect on increasing Regional Original Revenue (PAD) (Muslim et al., 2019). Then in this study will analyze the Effect of Gross Regional Domestic Product (GRDP) on Regional Original Revenue (PAD) in the Regency / City of West Java Province. by looking at the influence of the total population on Original Local Government Revenue (PAD) in the regency/city of West Java province, the effect of the gross regional domestic product (GRDP) on the Regional Original Revenue (PAD) in the regency/city of West Java province, and the influence of the population and Regional Original Revenue (PAD) together with Regional Original Revenue (PAD) in the Regency/City of West Java Province.

METHOD

This study uses quantitative methods. conducted to analyze PAD in Indonesia, where PAD is the dependent or dependent variable (Y) and the variable that affects PAD, namely GRDP, is the independent variable or the independent variable (X). The data used in this study is data from 2020. Multiple linear regression is an analytical method used and is appropriate when the study involves one dependent variable which is estimated to be related to one or more independent variables. The multiple linear regression analysis model used to test the hypothesis is as follows: $Y = b_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$

The data analysis method used is multiple linear regression analysis method with the help of SPSS for windows software (Ariefianto, 2012). The use of the analysis method in regression in testing the hypothesis is first tested whether the model has met the classical assumptions or not.

RESULTS AND DISCUSSION

Multiple Regression Analysis

Based on the results of calculations using the SPSS program as shown in the table below, it can be seen that the regression model obtained is: $Y = 908216338.8 + 1065,187 X_1 + 18,980 X_2$

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	908216338.8	382298845.0		2.376	.026		
	JP	1065.187	128.755	.830	8.273	.000	.988	1.012
	PDRB	18.980	9.799	.194	1.937	.065	.988	1.012

^a Dependent Variable: PAD

The constant value of the above equation is 908216338.8 which indicates the level of Original Local Government Revenue (PAD) by ignoring the X_1 and X_2 factors. The Population Variable (X_1) has a positive regression coefficient value of 1065,187 to Original Local Government Revenue (PAD). Which means that when there is an increase of 1 percent, Original Local Government Revenue (PAD) will decrease by 1065,187. The Gross Regional Domestic Product (GRDP) variable (X_2) has a positive regression coefficient of 18,980 against Original Local Government Revenue (PAD). Which means that when there is an increase of 1 percent, Original Local Government Revenue (PAD) will increase by 18,980.

Autocorrelation Classical Assumption Test

The autocorrelation test aims to test whether in a regression model there is a correlation between the confounding error in period t and the error in period $t-1$. The test that can be used to detect deviations from this classic assumption is the Durbin Watson test (D-W stat). Testing autocorrelation in a model aims to determine whether there is a correlation between the confounding variable (ϵ_t) in a certain period and the confounding variable in the previous period (ϵ_{t-1}). An

easy way to detect autocorrelation can be done with the Durbin Watson test. With the following conditions: according to Santoso, if the number in Durbin Watson ranges from -2 to +2 then the regression coefficient is free from autocorrelation interference, while if the DW number is below -2, it means that there is a positive autocorrelation and if the DW number is above +2, it means that there is a negative autocorrelation. In accordance with the data in table 4.4 below which shows the value of Durbin Watson of 0.234 which is between -2 to +2, it can be said that the regression coefficient is free from autocorrelation disturbances.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.873 ^a	.762	.742	865339396.40000	2.204

a. Predictors: (Constant), Gross Regional Domestic Product (GRDP), Total Population

b. Dependent Variable: Original Local Government Revenue

Classical Assumption Test for Normality

Normality test aims to test whether in a regression model, the dependent variable, the independent variable or both have a normal distribution or not. A good regression model is a normal or close to normal data distribution. To test the normality of this data using the graphical analysis method and see the normal probability plot.

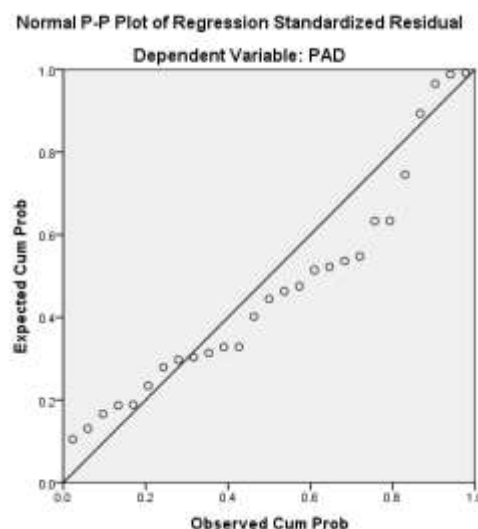


Figure 2. Normality Test

Classical Multicollinearity Assumption Test

Multicollinearity is a situation where the independent variables are correlated with one another. This test aims to test whether the regression model found a correlation between the independent variables. A good regression model should not have a correlation between the independent variables. Detection of multicollinearity in a model can be seen from several things, namely if the Variance Inflation Factor (VIF) is not more than 10 and if the tolerance is not less than 0.1, then the model can be said to be free from multicollinearity. As seen in the table of processed data using SPSS, it can be said that there

is no multicollinearity between independent variables in the regression mode.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	908216338.800	382298845.000	2.376	.026		
	JP	1065.187	128.755	.830	.000	.988	1.012
	PDRB	18.980	9.799	.194	.065	.988	1.012

a. Dependent Variable: PAD

Coefficient of Determination Test (R²)

The coefficient of determination R² test was conducted to find out how far the independent variable or the independent variable, in this case consisting of population and Gross Regional Domestic Product (GRDP), was able to explain the dependent variable, namely Original Local Government Revenue (PAD).

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.873 ^a	.762	.742	865339396.40000	2.204

a. Predictors: (Constant), Gross Regional Domestic Product (GRDP), Total Population

b. Dependent Variable: Original Local Government Revenue (PAD)

From the results of data processing using SPSS, it shows that R² = 0.742 can be interpreted that the independent variables, namely Total Population and Gross Regional Domestic Product (GRDP), are able to explain 74.2% of the dependent variable, namely Original Local Government Revenue (PAD). While as much as 25.8% is influenced by other factors not examined.

F Test

This test is intended to see the overall ability of the independent variables, namely the Total Population (X1) and Gross Regional Domestic Product (GRDP) (X2) to be able to explain the simultaneous effect on the Original Local Government Revenue (PAD) variable (Y).

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57399880460000000000.000	2	28699940230000000000.000	38.327	.000 ^b
	Residual	17971494500000000000.000	24	748812271000000000.000		
	Total	75371374960000010000.000	26			

a. Dependent Variable: Original Local Government Revenue (PAD)

b. Predictors: (Constant), Gross Regional Domestic Product (GRDP), Total Population

By looking at the regression results in the table above, it shows that F count = 38,327 while F table = 2.96. Thus, the two independent variables jointly affect the dependent variable, namely Original Local Government Revenue (PAD).

t Test

This test is conducted to see whether each independent variable has an effect on the dependent variable. In this case, it can be seen the

influence of the variable Number of Population and Gross Regional Domestic Product (GRDP) on Original Local Government Revenue (PAD).

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	908216338.800	382298845.000		2.376	.026		
JP	1065.187	128.755	.830	8.273	.000	.988	1.012
PDRB	18.980	9.799	.194	1.937	.065	.988	1.012

a. Dependent Variable: PAD

Based on the observation of the data above, it is known that t count (8.273) > t table (1.703) thus H_0 is rejected and H_1 is accepted with a significant level of 0.000 which is above 0.05, meaning that the population variable has a positive effect on Original Local Government Revenue (PAD) in Indonesia.

Based on the observation of the data above, it is known that T arithmetic (1.937) > T table (1.703) thus H_0 is accepted and H_1 is rejected with a significant level of 0.065 which is below 0.05, meaning that the Gross Regional Domestic Product (GRDP) variable has no effect on Original Local Government Revenue (PAD) in Indonesia.

CONCLUSION

Based on the results of the research and discussion that have been described previously, the following conclusions can be drawn: Population has a positive effect on Original Local Government Revenue (PAD), Gross Regional Domestic Product (GRDP) has no effect on Original Local Government Revenue (PAD), and the total population and Gross Regional Domestic Product (GRDP) together affect the dependent variable, namely Original Local Government Revenue (PAD).

REFERENCES

- Adejarea, A. T., & Akandeb, S. S. (2018). The assessment of the impact of taxation on local government revenue in Oyo State. *Noble International Journal of Economics and Financial Research*, 3(12), 133–141.
- Adriani, E., & Handayani, S. I. (2017). Pengaruh PDRB dan jumlah penduduk terhadap pendapatan asli daerah Kabupaten Merangin. *Jurnal Ilmiah Universitas Batanghari Jambi*, 8(2), 1–6.
- Allers, M., De Haan, J., & Sterks, C. (2001). Partisan influence on the local tax burden in the Netherlands. *Public Choice*, 106(3), 351–363.
- Ariefianto, M. D. (2012). *Ekonometrika: esensi dan aplikasi dengan menggunakan EViews*.
- Ariyani, A., Yetti, F., & Lastiningsih, N. (2018). Pengaruh Produk Domestik Regional Bruto (PDRB), Jumlah Penduduk dan Pajak Hotel Terhadap Pendapatan Asli Daerah (PAD). *Jurnal Ilmiah Wahana Akuntansi*, 13(1), 58–69.
- Asari, N. M. A., & Suardana, K. A. (2018). Pengaruh pendapatan asli daerah, dana perimbangan, dan lain-lain pendapatan daerah

- yang sah pada belanja daerah. *E-Jurnal Akuntansi*, 25(2), 877–904.
- Asmuruf, M. (2015). Pengaruh Pendapatan Dan Jumlah Penduduk Terhadap Pendapatan Asli Daerah (PAD) Di Kota Sorong. *Jurnal Berkala Ilmiah Efisiensi*, 15(5).
- Baldrice, S. (2015). Akuntansi Sektor Publik; Akuntansi Keuangan Pemerintah Daerah Berbasis Akrua.
- Darise, N. (2006). Pengelolaan Keuangan Daerah, PT. *Indeks Kelompok Gramedia Anggota IKAPI, Jakarta*.
- Duha, J., & Saputro, G. E. (2022). Blue Economy Indonesia to Increase National Income through the Indian Ocean Rim Association (IORA) in the Order to Empower the World Maritime Axis and Strengthen State Defense. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 7(2), 514–527.
- Firdausy, C. (2018). Kebijakan dan strategi peningkatan pendapatan asli daerah dalam pembangunan nasional. Yayasan Pustaka Obor Indonesia.
- Hertanto, I., & Sriyana, J. (2011). Sumber Pendapatan Asli Daerah Kabupaten dan Kota. *Jurnal Ekonomi & Studi Pembangunan*, 12(1), 76–89.
- Iman, I. N., Amaliah, I., & Haviz, M. (2019). Pengaruh Jumlah Penduduk, PDRB dan Belanja Daerah terhadap Pendapatan Asli Daerah (PAD) di Kabupaten Bandung Tahun 2000-2017. *Prosiding Ilmu Ekonomi*, 386–393.
- Indriani, I. K., Lestari, M. P., & Triani, M. (2020). Analisis kondisi keuangan pemerintah kabupaten di Kalimantan. *Inventory: Jurnal Akuntansi*, 4(2), 175–182.
- Juliansyah, H. (2018). Pengaruh Total Penduduk Dan Produk Domestik Regional Bruto Terhadap Pendapatan Asli Daerah Kabupaten Simeulue. *Sumber*, 18(105), 12.
- Kurniawan, D. (2019). Faktor-faktor yang mempengaruhi pendapatan asli daerah (pad) sebagai pendorong kemandirian keuangan daerah pada kota bontang. *Jurnal Ilmu Ekonomi Mulawarman (JIEM)*, 3(3).
- Kusuma, M. K. A. A., & Wirawati, N. G. P. (2013). Analisis pengaruh penerimaan pajak daerah dan retribusi daerah terhadap peningkatan PAD Sekabupaten/kota di Provinsi Bali. *E-Jurnal Akuntansi*, 5(3), 544–560.
- Lyu, C., Wang, K., Zhang, F., & Zhang, X. (2018). GDP management to meet or beat growth targets. *Journal of Accounting and Economics*, 66(1), 318–338.
- Murib, D. (2018). Pengaruh jumlah penduduk, pendapatan perkapita, PDRB terhadap PAD di Kabupaten Mimika Provinsi Papua. *Jurnal Berkala Ilmiah Efisiensi*, 18(01).
- Muslim, C., Rahman, Z., & others. (2019). Pengaruh PDRB, Jumlah Penduduk dan Tingkat Inflasi Terhadap Pendapatan Asli Daerah Kota Kendari. *PARADOKS: Jurnal Ilmu Ekonomi*, 2(3), 57–65.

- Perwira, R. (2018). Pengaruh Pdrb, Pengeluaran Pembangunan dan Jumlah Penduduk Produktif Terhadap Pendapatan Asli Daerah di Kabupaten/Kota Di Sulawesi Tengah. *Katalogis*, 6(2).
- Prana, R. R. (2019). Analisis faktor-faktor yang mempengaruhi pendapatan asli daerah (PAD) Kota Tebing Tinggi. *Jurnal Ilman: Jurnal Ilmu Manajemen*, 4(1).
- Sahrudin, S. (2017). Upaya Peningkatan Pajak Daerah dalam Mendukung Pelaksanaan Otonomi Daerah di Kabupaten Bima. *JABE (Journal of Applied Business and Economic)*, 3(4), 220–233.
- Santosa, P. B., & Rahayu, R. P. (2005). Analisis Pendapatan Asli Daerah (PAD) dan Faktor-faktor yang mempengaruhinya dalam upaya pelaksanaan otonomi daerah di Kabupaten Kediri. *Jurnal Dinamika Pembangunan (JDP)*, 2(Nomor 1), 9–18.
- Sari, P. L. P. (2013). Analisis variabel-variabel yang mempengaruhi pendapatan asli daerah (PAD) Provinsi Bali. *Jurnal Ilmiah Akuntansi Dan Humanika*, 2(2).
- Sukirno, S. (2006). Teori Pengantar Mikro Ekonomi, Raja Grafindo Persada. Jakarta.
- Utama, M. S., & Suartini, N. N. (2013). Pengaruh jumlah kunjungan wisatawan, pajak hiburan, pajak hotel dan restoran terhadap pendapatan asli daerah di Kabupaten Gianyar. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 2, 44684.
- Weley, I. R., Kumenaung, A. G., & Sumual, J. I. (2019). Analisis pengaruh inflasi dan produk domestik regional bruto (PDRB) terhadap pendapatan asli daerah di Kota Manado. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 18(6).