The Effect of GRDP and Income Inequality on Regional Expenditures Regency/City in Bangka Belitung Islands Province

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ABSTRACT

Regional spending is an important part of the economy of a regional government for the welfare of its people through spending with the right realization in creating public services in building facilities and infrastructure so that it can be enjoyed and utilized properly by all levels of society. Regional spending spent by the government is influenced by various factors. The purpose of conducting this research is to find out and analyze what factors can influence regional spending in the districts/cities of the Bangka Belitung Islands Province in 2013-2020. The population in this study is the districts/cities of the Bangka Belitung Islands Province. The sample used in the findings of this study was from 2013-2020 for eight years and there were 56 data observers from the Central Bureau of Statistics. The research method used is by using *Fixed Effect panel data* assisted by *Stata 12 software* . The independent variables used in this finding are gross regional domestic product and income inequality. As for the trick variable, namely regional spending in the districts/cities of the Bangka Belitung Islands Province in 2013-2020. From the results of estimation and statistical processing, it was found that the gross regional domestic product and income inequality of the Bangka Belitung Islands Province significantly positively affected regional expenditures, while the gross regional domestic product of the Bangka Belitung Islands Province did not significantly affect regional expenditures.

Keywords: *Gross Regional Domestic Product, Income Inequality, Regional Expenditure.*

1. INTRODUCTION

Regional governments carry out regional expenditures or expenditures to provide public services under the authority of provinces, districts/cities in the context of administering government affairs. The government in the public economy has three main functions, namely the first function of allocation, which means that the government has a function in planning an efficient allocation of resources. The distribution function means that the government has to realize equity *and* fairness*,* while the stabilization function means that the government functions to ensure that various macroeconomic problems such as inflation, exchange rates, unemployment and poverty can be controlled. The allocation function itself can be more effectively handed over to local governments, while the distribution and stabilization functions are better held by the central government. Regional spending, namely all regional obligations such as: obligatory, optional, and matters belonging to certain fields that can be carried out jointly by the regional government. Regional spending, in other words, is part of regional expenditure. Direct spending and indirect spending are part of regional spending [19].

Increasing local government spending is one approach to boosting economic growth. Regional spending itself can have an impact on people's welfare because it determines the level of public services that will be provided and utilized by the community. Adolf Wagner said that government spending and government activity would increase over time [9]. According to Wagner, when the per capita income of the economy increases, so does

in carrying out administrative and protection functions, which with an increase in population there will be an increase in spending to carry out these functions [16].
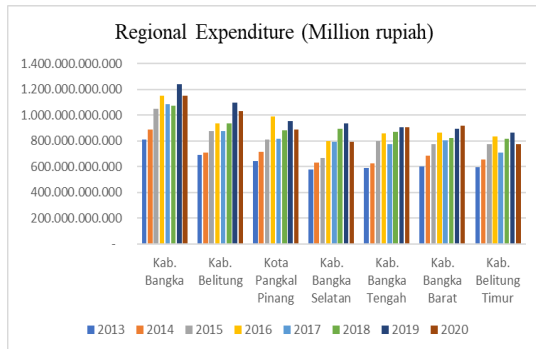

Figure 1. Regency/City Regional Expenditure in Bangka Belitung Province 2013-2020

Source: Ministry of Finance Directorate General of Taxes (2013-2020)

Regional Expenditure in 2013-2016 saw an increase in regencies and cities of Bangka Belitung Province but after 2016-2020 it experienced fluctuations. It can be seen from 2016-2017 that all regencies/cities of the Bangka Belitung Province experienced a simultaneous decrease in regional spending, the most frequent decrease occurred in the city of Pangkal Pinang which in 2016 amounted to Rp.990,400,827 then decreased by Rp. 816,819,790. The highest regional expenditure occurred in Bangka Regency, amounting to Rp. 1,242,579,345 and the lowest was South Bangka Regency, namely Rp. 710,661,361.

This unusual decrease in Regional Expenditure has a discrepancy, where the decrease in the realization of the city has higher expenditure than the district which should have a high regional expenditure because the city of Pangkal Pinang is the administrative center of the province of Bangka Belitung itself. So we can see clearly that government revenues and expenditures vary from region to region in the Bangka Belitung Islands Province with 6 Regencies and 1 City. Each expenditure issued by the regional government is carried out in accordance with the income it has, namely the revenue from the potential of an area. In this study, it is suspected that there are fluctuations in regional spending in various regencies and cities in the Bangka Belitung Islands Province due to several variables, one of which is GRDP, with the following conditions.
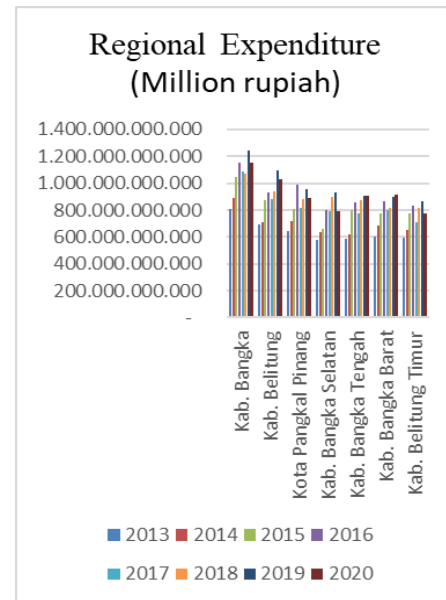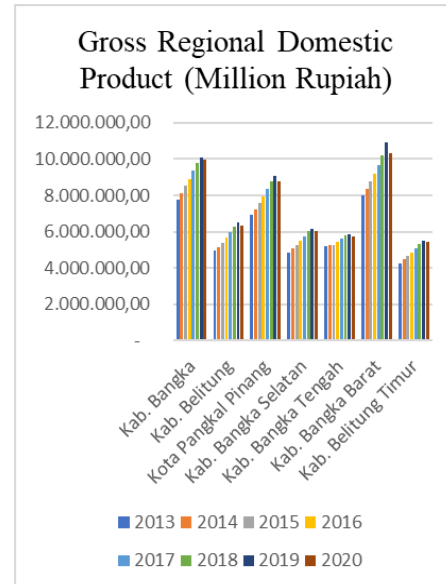

Figure 2. Graph of District/City GRDP in Bangka Belitung Province for 2013-2020 (Million Rupiah)

Source: Central Bureau of Statistics (2013-2020)

Based on figure 5 GRDP of district/city Bangka Belitung Province for the period 2013 to 2020 has the highest is West Bangka Regency, then East Belitung Regency has the lowest ADHK GRDP. Then in 2016-2017 the GRDP of the districts/cities of Bangka Belitung Province has increased, but if you look at Regional Expenditures in Regencies/Cities in Bangka Belitung Province in a year with a decrease. In 2017-2018 the GRDP in the Bangka district has increased but

regional spending has decreased. Then 2019-2020 Regency/City GRDP in Bangka Belitung Province experienced a decline, but regional spending in Central Bangka Regency and West Bangka Regency increased. This is certainly a phenomenon that occurs because in theory. To increase regional spending, the amount of GRDP must also increase. As a result, the central government allocates more funds to increase the potential of existing regions for the benefit of public services, the higher the GRDP, the higher the income earned by the districts/cities, in line with the higher revenues received by the regions. The economic growth of a region is usually assessed using GRDP. According to Peacock and Wiseman's theory of the evolution of government spending, economic growth (GDP) leads to increased tax collections even though tax rates remain the same, with increased tax revenues also leading to higher government spending.

Several previous studies have tried to see things related to this research, namely research from [13], [8], and [15].
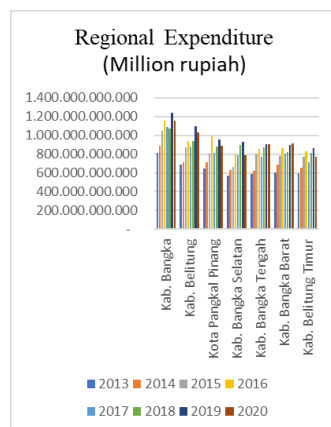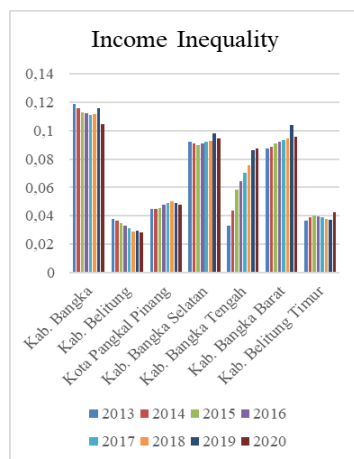

Figure 3. Graph of Regency/City Income Inequality in Bangka Belitung Province in 2013-2020
Source: Central Bureau of Statistics (2013-2020)

From the picture above, the inequality rate in the districts/cities of the Bangka Belitung province is still very high, namely above 0.35 which illustrates that the inequality that occurs is very high and there are also many above 0.5 inequality rates in a district/city of the province of Bangka Belitung. According to Keynes, the GDP of a country or the GRDP of an area includes government spending. Because some products and services acquired in the economy are not exchangeable, transfer payments are not included in government spending. The projected increase in spending across income levels is the result of higher government spending as a component of spending. Income inequality will decrease as people's income increases and regional spending will increase and vice versa if regional spending decreases, inequality will be high. The effect of income inequality on regional spending is in line with research [17] who said the APBD capital expenditure allocation can have a significant positive effect on income inequality.

After explaining the background of the problem, several formulations of the problem are drawn, namely how is the effect of Population, Regional Original Income, Gross Regional Domestic Product, Income Inequality on Regional Expenditures in the Districts/Cities of the Bangka Belitung Islands Province in 2013-2020? Based on these problems, the research objectives were obtained, namely to find out and analyze the effect of Gross Regional Domestic Product and Income Inequality on Regional Expenditures in the Regencies/Cities of the Bangka Belitung Islands Province in 2013-2020

2. LITERATURE REVIEW

2.1. Regional Expenditure Theory according to Adolf Wagner

According to *Adolf Wagner*, regional spending and government activities have been increasing year by year [9]. This statement by *Wagner* is known as the law which always raises the role of government. Making the government function through the activities and economic activities of society as a whole is the main goal of this theory. According to *Wagner*, as the per capita income of the economy rises, so does government spending, mainly as a result of the need for government regulations concerning social interaction, law, education, recreation, and other fields [18].

2.2. Peacock and Wiseman's Local Expenditure Theory

The most effective theories and models are the theories of Peacock and Wiseman. Their theory, commonly known as *the displacement effect*, is based on the idea that people don't want to pay more and more expensive taxes in bearing government spending which continues to rise while the government always increases spending and expects a lot. from tax revenue sources . Greater tax

revenue from the tax sector, although the tax rate has not changed, tax collection in the community has also increased [15].

2.3. Definition of Gross Regional Domestic Product

GRDP as defined by BPS, is the total gross added value obtained from commercial entities in the domestic area / the total value of finished goods and services obtained from all economic activities in a region. Examples of economic activities such as agricultural activities, mining, processing industry, to service [20].

2.4. Definition of income inequality

Inequality of income distribution is a problem of differences in income between advanced and underdeveloped communities. The income gap will be more and more if the income gap is getting bigger and the distribution of income will be more varied [3].

3. RESEARCH METHODOLOGY

3.1. Population and Sample

In this study, the research population was 7 regencies or cities in the Bangka Belitung Islands Province which included Kab. Bangka, Pangkalpinang City, Kab. Belitung, Kab. South Bangka, Kab. Central Bangka, Kab. West Bangka, and Kab. East Belitung, with the factors used namely Regional Expenditure, Gross Regional Domestic and Income Inequality. Using secondary data in the form of mixed *cross-sectional* panel data in 7 regencies/cities in the Bangka Belitung Islands Province and *the time series* from 2013-2020 was used as a sample for this finding . It can be said that there are 56 (n=56) *observers* . The reason for using the period in this finding is from the 2013-2020 period because the 2013 global economy, which was marked by slowing growth, declining commodity prices and reversal of capital flows, has put pressure on the Indonesian economy both through trade and financial channels. At the same time, the domestic structure does not support these external changes so that economic adjustment becomes hampered. however, the period of this analysis is only up to the 2020 period due to limited data from the variables used for this finding. In taking samples using *non-probability sampling method* and using the saturated sample method.

3.2. Data Types and Data Sources

This finding uses secondary data in the form of panel data combined *with cross sections* in regencies/cities in the Bangka Belitung Islands Province and *time series* from 2013-2020. The data used for this finding are quantitative data, namely where the variables are measured using data that contains numbers obtained from calculation results that can be analyzed using

statistical systematics, namely by using Regional Expenditure data, Gross Regional Domestic Product and Income Inequality from year 2013-2020. The data source used for this finding was obtained through data from the Central Bureau of Statistics (https://bbel.bps.go.id/) and the DJPK of the Ministry of Finance (https://djpk.kemenkeu.go.id/)

3.3. Data Data collection

In supporting the needs of this finding data, this data was collected using several methods, namely the documentation method and literature study.

3.4. Data Analysis Technique

This finding uses panel data which is a mixture of *time series data* and *cross section data, time series* data obtained from time to time through 1 individual. Likewise, *cross section data* is data obtained at one time through many individuals. Panel data regression equation Multiple linear regression is a model that analyzes the relationship between the dependent variable and the four independent variables [5]. In testing using the panel data method, there are 3 (three) method approaches namely, Common Effect, Fixed Effect, and Random Effect. Selection of the best model is done by using 3 tests, namely:

3.4.1. Chow test

To determine the best model between CEM and FEM, if the p value is <5% then FEM is the best

3.4.2. Hausman test

To determine the best model between FEM and REM if the p value is < 5% then the best FEM

3.4.3. Lagrange Multiplier Test (LM)

To determine the best model between REM and CEM if the p value is < 5% then if the *Breusch-Pagan probability value* is less than the alpha value then Ho is rejected which means the right estimate for panel data regression is a *random effect model*

4. RESULTS AND DISCUSSION

4.1. Description of Research Object

Bangka Belitung is one of the provinces in Indonesia. The province consists of two islands namely Bangka and Belitung Islands, geographically located between 104º50' and 109º30' East Longitude and 0º50' and 4º10' South Latitude . Its boundaries are the West Bangka Strait, East Karimata Strait, North Natuna Sea and South Java Sea. The Bangka Belitung Archipelago Province has a combined land and water area of 81,725.06 km ^{2} . The land area of the Bangka Belitung Islands Province is approximately 16,424.06 km2 [or] 20.10% of the total area, and the sea area is approximately and approximately 65,301 km2 [or] 79.90%

of the total area. Six regencies and one city form the administrative area of the Bangka Belitung Islands Province. There are 348 villages/kelurahan and 40 sub-districts in the region. Regencies and cities in the Bangka Belitung Archipelago Province covered in this finding are Bangka, Belitung, West Bangka, Central Bangka, South Bangka, East Belitung, and Pangkalpinang City.

4.1.1. Normality test

This test is carried out to detect whether the data used is normally distributed or not by looking at the probability value. The criteria are:

a. probability > α (5%), that is, the data is normally distributed.

b. probability < α (5%), that is, the data is not normally distributed

Table 1. Normality Test Results

Variable	Obs	W	V	z	Prob>z
Res	56	0.97660	1,204	0.399	0.34511

Source: Results of Stata 12 Data Processing

Based on table 9 above, the probability value is 0.34511 > 0.05 which indicates that the data is normally distributed. So it can be concluded that the panel data regression model has fulfilled the assumption of normality.

4.1.2. Multicollinearity Test

This test is carried out to detect whether the data used is normally distributed or not by looking at the probability value. The criteria are: The multicollinearity test has the goal of testing whether the regression model finds a correlation between independent (independent) variables. Multicollinearity detection can be seen through the value of *Variance Inflation Factors (VIF)* on the test results if the relationship between variables has a large value of 0.90, it can be concluded that there is a multicollinearity problem [5].

Table 2. The results of the multicollinearity test use the VIF value

Variable	VIF	1/VIF
GRDP	2.42	0.413949
KP	2.39	0.418749
VIF means	3.56	

Source: Results of Stata 12 Data Processing
In table 10, it can be seen that the VIF value does not exceed 10, which means that the data used in this finding is free from multicollinearity problems. The existence of multicollinearity can be seen from the value of *Variance Inflation Factors (VIF)* in the findings, if the relationship between variables has a large value of

10, it can be concluded that there are symptoms of multicollinearity [5].

Table 3. Multicollinearity test results use correlation values

	BD	GRDP	KP
BD	1.0000		
GRDP	0.5406	1.0000	
KP	0.2814	0.5415	1.0000

Source: Results of Stata 12 Data Processing
From the results of the multicollinearity test it can be explained that the results of *Centered* VIF (*Variance Inflation Factor*) on the GRDP and Income Inequality variables have a value of <0.90. So it can be concluded that this model is free from multicollinearity.

4.1.3. Heteroscedasticity Test

This heteroscedasticity test has the goal of determining whether the absolute residual variation of each observation is the same or not. The theory is:
a. f the variable < α (0.05), which indicates detected heteroscedasticity.
b. f the variable > α (0.05), which indicates that it is free from heteroscedasticity problems.

Table 4. Heteroscedasticity Test Results

Modified Wald test for groupwise heteroscedasticity
in fixed effect regression model
H0: sigma(i)^2 = sigma^2 for all i
chi2 (7) = 2.61
Prob>chi2 = 0.9188

Source: Results of Stata 12 Data Processing
If seen in table 13, it is explained that Prob. which is 0.9188 , this proves the value of Prob. F count is greater than 0.05 (α), so based on the hypothesis test, H_0 is rejected, which means the data is free from heteroscedasticity.

4.1.4. Autocorrelation Test

The opinion [15] is the use of the Autocorrelation Test in the regression model in order to find out whether the model has a correlation or residual relationship in the t period or now with the previous year. In this test, the autocorrelation test was carried out twice. The first is the autocorrelation test that occurs between time *series* on the same individual or known as serial correlation or *temporal correlation*. The following are the results of the autocorrelation test between time periods.

Table 5. Autocorrelation Test Results Between Time Periods

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F(1, 6) = 34.041
Probs > F = 0.0011

Source: Results of Stata 12 Data Processing

If the prob is more than 5% then there is no autocol problem. Based on the results of data processing, the results of the prob are 0.0011, which means there is a probability problem. autocorrelation that occurs between individuals or cross sectional units at the same time period is known as cross sectional correlation or cross sectional dependence or spatial dependence (Driss and Kraay, 1997, spatial autocorrelation (Gujarati and Porter, 2009) **.**

Table 6. Autocorrelation Test Results between Cross Sections

Pesaran's test of cross-sectional independence = 7.854, Pr = 0.0000

Source: Results of Stata 12 Data Processing

If the prob value is > 0.050, it means that there is no autocorrelation problem. It can be seen from table 14 the results of the autocorrelation test between *cross sections* that the probability is 0.0000 which means <0.050 so there is a problem of autocorrelation between *cross sections.* Thus these results have an autocorrelation problem. For this reason, handling is needed to overcome the problem of autocorrelation between time periods and between *cross sections*, as follows:

Table 7. Autocorrelation Test Handling Results between time periods and between Cross Sections

BD	Coef.	std. Err.	Z	p> |z|	[95% Conf.	interv al]
GR DP	-.0826 71	.0565 881	- 1.4 6	0.1 44	- .1935 82	.0282 392
KP	- 2.957 07	.3396 827	- 8.7 1	0.0 00	- 2.291 31	3.622 839
_con s	21.28 929	.7915 588	26. 90	0.0 00	19.73 786	22.84 072

Source: Results of Stata 12 Data Processing

In 1967, Parks first developed the FGLS method so that the resulting estimator was named Parks estimator (Parks estimators). Handling the FGLS method will reduce the standard error in each variable, which will result in an increased z value. Based on the results of the data processing above, it can be seen and compared with the best model of this study, namely the *fixed effect model* where the z value for each variable has a value that can show an increase compared to the t value in the *fixed effect model.* That way , this study is considered free from autocorrelation problems.

4.2. Model Determination Techniques

4.2.1. Hausman test

After the Chow Test was carried out, the determination between *CEM* and *FEM* resulted in the best model being *FEM,* then continued with the Hausman Test which determined the best between *FEM* and *REM* which

resulted in the best model being *FEM* . Then the Lagrange Multiplier Test or also called the *REM significance test* developed by *Bruesch Pagan* . The purpose of this experiment is to determine which is better, the *REM model* or the *CEM model* for estimating panel data, and *REM is the best* . The following are the test results obtained:

Table 8. Hausman Test Results

Prob>chi2 = 0.0000

Source: Results of Stata 12 Data Processing

With the decision rule, accept H $_0$ if the probability result is < α (0.05), which indicates that *FEM* is better than *REM* , then from the Hausman Test results above it can be seen that the Prob>chi2 value has a result of 0.0000 which means probability < 0.05 so H $_0$ is rejected then it can be concluded that the best model in this invention is *FEM* .

Table 9. Fixed Effect Model Panel Data Regression Results

BD	Coef.	std. Err.	Z	p> |z|	[95% Conf.	interv al]
GR DP	- .0826 71	.0565 881	- 1.4 6	0.1 44	- .1935 82	.0282 392
KP	- 2.957 07	.3396 827	- 8.7 1	0.0 00	- 2.291 31	3.622 839
_co ns	21.28 929	.7915 588	26. 90	0.0 00	19.73 786	22.84 072

Source: Results of Stata 12 Data Processing

From table 17, the regression equation is obtained as follows:

BD = 21.28929 - 0.082671 GRDP -2.957073 KP + e

The panel data regression equation can be explained as follows:

a. Constant of 21.28929 means that if the independent variable has a value of 0, then Regional Expenditure equals 21.28929

b. The GRDP regression coefficient is -0.082671 meaning that if GRDP increases by 1, then Regional Expenditure decreases by 0.082671. There is a negative relationship between GRDP and regional spending.

c. The regression coefficient of income inequality is -2.957073, meaning that if income inequality increases by 1, then regional spending decreases by 2.957073. There is a negative relationship between income inequality and regional spending.

4.3. Hypothesis Testing and Analysis

4.3.1. z test

The t test in this study was changed to the z test because the data were considered to be close to a normal distribution. In addition, there was a change from the t test to the z test because of the handling of the problem

in the classic assumption test, namely autocorrelation so that the results used were using the z test which was considered better and normally distributed than the previous one. This test is used to show the extent to which the independent variables individually explain the dependent variable. In making a hypothesis decision, there are criteria from the z test, namely as follows:

a. If Prob > |z| < α (0.05) then H0 is rejected and Ha is accepted, which means that the independent variables individually have a significant positive or negative effect on the dependent variable.

b. If Prob > |z| > α (0.05) then H0 is accepted and Ha is rejected, which means that the independent variables individually do not have a significant positive or negative effect on the dependent variable.

Table 10. Test Results z

BD	Coef.	std. Err.	Z	p> |z|	[95% Conf.	interval]
GR DP	- .0826 71	.0565 881	- 1.4 6	0.1 44	- .1935 82	.0282 392
KP	- 2.957 07	.3396 827	- 8.7 1	0.0 00	- 2.291 31	3.622 839
_con s	21.28 929	.7915 588	26. 90	0.0 00	19.73 786	22.84 072

Source: Results of Stata 12 Data Processing

In this study, the results of the z test were obtained as follows:

a. Testing on GRDP variables

GRDP has a probability of 0.144 <0.05 indicating statistically H_0 is accepted so that it can be said that GRDP has no significant negative effect on regional spending or in other words the third hypothesis in this research is rejected.

b. Tests on income inequality variables

Income inequality has a probability of 0.0000 <0.05 indicating statistically H_0 is rejected so that it can be said that income inequality has a significant positive effect on regional spending or in other words the fourth hypothesis in this research can be accepted.

4.3.2. F test

The F test is to evaluate the significance of the fit of the multiple linear regression model on the data. In other words, the F test evaluates the importance of each regression coefficient simultaneously or simultaneously. For hypothetical decision making, the probability value is less than 0.05, which indicates that all independent factors together have a large influence on the dependent variable.

Table 11. F test results

Wald chi2(4) = 612.89
Prob > chi2 = 0.0000

Source: Results of Stata 12 Data Processing

Based on the table above the F test has a probability of 0.0000 <0.05 so that it can be interpreted as GRDP and

Income inequality simultaneously has a significant effect on regional spending.

4.4. Determination Coefficient Test

The coefficient of determination (R^2) has a value range between 0-1. If the value of R^2 is low, it means that the ability to explain the dependent variable to the independent variable is very limited. Likewise, if R2 is high, that is, close to 1, it means that the ability of the independent variable can explain the large dependent variable.

Table 12. Determination Coefficient Test Results

R-sq: within = 0.7646 between = 0.5557 overall = 0.4146

Source: Results of Stata 12 Data Processing

From the table above, it can be seen that R-square (R^2) 0.4146 means that the dependent variable (regional spending) can be explained by the independent variable (GRDP and income inequality) of 41.46% while the remaining 58.54% of regional spending is explained by other variables in outside research.

4.5. Economic Analysis and Discussion

4.5.1. Analysis of the Effect of GRDP Variables on Regional Expenditures in the Regency/City of the Bangka Belitung Islands

Adolf Wagner stated that government spending and activity increased from year to year [9]. Wagner called this trend law, which is constantly expanding the role of government. Making the government's role to advance the activities and economic life of society as a whole is the main goal of this theory. According to *Wagner*, as the per capita income of the economy rises, so does government spending increase as a result of the need to regulate relations that arise from society, law, education, recreation, culture, as well as other fields [18]. *Adolf Wagner's* theory states that for any country, public spending continues to increase as income growth increases. The results of this study have no effect on regional spending. This research is in line with research conducted by [14], [11], [10]. According to his research findings, regional spending is not affected by economic growth as measured by GRDP. This is because the activities of the agriculture, mining, manufacturing and service sectors are still constrained by the number and quality of the ability of field extension workers to carry out their work. Good infrastructure, or facilities and infrastructure financed by capital expenditures, can also boost economic growth. However, because the local government did not channel its capital expenditures according to the target, the infrastructure support available in the Bangka Belitung Islands Province was insufficient and the large amount of regional expenditures used over the past eight years has only been spent on personnel expenditures and goods expenditures. In addition, low investment can also affect GRDP, because it is very important that investment for

regional economic growth in building infrastructure is needed by local governments. Improvement of infrastructure facilities, certainty of business licenses, clarity of law, and local security conditions that are still difficult to hinder investment.

This finding is inconsistent with Adolf Wagner's ideas and findings by [15] which explains that each Regency/City in the Bangka Belitung Islands Province has a significant positive influence on Regional Expenditures. This is due to the abundant potential of natural resources such as agriculture, mining and fisheries.

As a result, from these findings it can be seen that GRDP has no influence on increasing the regional expenditure allocation for the Bangka Belitung Islands Province for the 2013-2020 period. Where what should be one of the main goals of the central and regional governments is to support economic growth through GDP when economic growth increases, regional spending also increases in order to improve and improve other facilities and infrastructure so that future economic growth will continue to improve.

4.5.2. Analysis of the Influence of Income Inequality Variables on Regional Expenditures in the Regency/City of the Bangka Belitung Islands

Keynesian theory says government spending is part of a country's GDP or GRDP. Government spending does not include a transfer payment component because there is no exchange for a portion of the economy's output of goods and services. As a component of expenditure, higher government purchases result in higher planned expenditures for all levels of income. Because there is no exchange for some of the goods and services produced by the economy, transfer payments are not a part of government spending. The projected increase in spending for all income levels is the result of higher government spending as a component of spending. With an increase in people's income, income disparities will also decrease and vice versa if regional spending decreases, inequality will be high. This is also in accordance with the ideas of Adolf Wagner (in Mangkoesoebroto, 1993). Government spending will increase over time, according to Wagner, within an economy. Increasing the amount of money issued by the government will increase per capita income. Income per capita is one of the measuring tools used to calculate the Williamson Index. Therefore, researchers used the Williamson Index to measure income inequality between districts/cities in the Bangka Belitung Islands Province. This is in line with the theory of Keynes in the Bangka Belitung Islands Province. These findings also align with the research [4] states that regional spending has an influence on increasing inequality. Because the level of income inequality is decreasing every year, the smallest inequality is in the Belitung Regency of 0.0285 which indicates that income inequality is decreasing and more evenly distributed in all districts/cities in the

Bangka Belitung Islands Province. This is because the people of the Babylon Islands implement this economic distribution by utilizing existing community economic resources, such as promoting small shops compared to large businesses. Then it is different from research [1] which says that inequality in income distribution has no effect on government spending. Due to the lack of optimal government in channeling the budget to implementing programs such as by promoting stalls rather than franchise networks such as providing social assistance, the Rice Prosperity Program, health cards, smart cards, assistance with production equipment, providing access to capital and optimizing KUR.

Thus, based on the research findings, it is clear that the theory and hypothesis used, namely income inequality in the seven provinces and cities affecting regional expenditure allocations, are consistent with what is observed in the Bangka Belitung Islands. Fluctuations in income inequality are influenced by variations in regional government spending. Therefore, the amount of income inequality will decrease with every increase in local government spending. Which means that any high spending by the government will result in smaller overall income inequality as well as low regional government spending which can have an impact on increasing income inequality. This has the implication that any non-productive government spending will have an impact on increasing per capita income in order to spur economic growth which is more focused on accelerating growth to reduce income inequality

CONCLUSION

From these findings the results conclude that the influence of the four dependent variables studied on Regional Expenditure is as follows:

a. The Gross Regional Domestic Product of the Bangka Belitung Archipelago Province is significantly negative and does not affect regional spending in each of its districts and cities. This is because the activities of the agriculture, mining, manufacturing and service sectors are still constrained by the number and quality of the ability of field extension workers to carry out their work. This means that in this case it explains that an increase in GRDP is not able to increase regional spending.

b. Income Inequality of the Bangka Belitung Islands Province significantly positively affects regional spending in each district and city. The low inequality occurs because the people of the Babel Islands implement this economic distribution by utilizing existing community economic resources, such as promoting small shops compared to large businesses so that it also has an effect on increasing regional spending in the Bangka Belitung Islands Province.

From the findings obtained, the researcher would like to provide suggestions on important aspects of this finding, including:

Theoretical Aspects or Theoretical Suggestions
a. It is recommended that future researchers if they want to analyze the same topic should use other independent variables beyond these findings. To find out what characteristics can show a more thorough direct effect on regional spending .
b. The author hopes that future researchers will be able to access and use the findings data over a longer period of time and with a wider research object, with the aim that the findings from the research can support gap research and provide even better answers.

Practical Aspects or Practical Advice
a. It is hoped that the government will be able to realize spending on blood properly and even better so that services to the public can be received and enjoyed by the community equally.
b. To increase the tourist area in the Bangka Belitung Islands Province, the government needs to facilitate tourism infrastructure in the national tourism strategy area set by the government in attracting tourists so that this can increase regional income which will also have an impact on regional spending so that the government can realize its budget which can affect in facilitating public services that can later be enjoyed and accepted by the people of the Bangka Belitung Islands Province.

REFERENCES

[1] Anugra, R., Marwa, T., & Imelda. (2016). Analysis of the Relationship Between Government Expenditure and Inequality in Income Distribution in South Sumatra Province. *Journal of Development Economics* , 21-40.

[2] Dahliah. (2022). The Effect of Regional Original Income, Total Population and General Allocation Fund on Regional Expenditures. *Journal of Economics & Sharia Economics* , 2614-3259.

[3] Damanik, AM, Zulgani, & Rosmeli. (2018). Factors Influencing Income Inequality Through Economic Growth In Jambi Province. *E-Journal of Economic Perspectives and Regional Development* , 15-25.

[4] Febrianto, R. (2017). Analysis of the Influence of Economic Growth, Regional Spending, and HDI on Income Inequality Between Regions in East Java Province 2011-2015. 1-13.

[5] Ghozali, I., & Ratmono, D. (2017). *Multivariate Analysis and Econometrics 2nd Edition.* Semarang: Publishing Agency - Undip.

[6] Handayani, AT, Suryati, T., Marsela, HA, Luqmana, D., & Anwar, S. (2022). The Effect of Regional Original Income, Profit Sharing Funds, Total Population on Regency/City Regional Expenditures in West Nusa Tenggara Province. *Journal of Social Sciences* , 41-57.

[7] Helmayunita, N., & Fadilah, H. (2020). Flypaper Effect Analysis on General Allocation Funds, and Flypaper Effect Analysis on General Allocation Funds, Regional Funds on Expenditures in Provinces in Indonesia. *Journal of Exploratory Accounting* , 3144-3159.

[8] Hermanto, SB (2017). Factors Influencing Regional Spending in East Java Regencies/Cities. *Journal of Accounting Science and Research* , 1-21.

[9] Idris, A. (2016). *Public Economics.* Yogyakarta: Deepublish.

[10] Jaya, IP, & Dwirandra, A. (2014). The Effect of Regional Original Income on Capital Expenditures with Economic Growth as a Moderating Variable. *Udayana University Accounting E-Journal* , 79-92.

[11] Maslikah, SH (2014). The Influence of Economic Growth, Regional Original Income and General Allocation Funds on Capital Expenditure Budget Allocation (Case Study in Regencies/Cities in Central Java Province). 1-18.

[12] Ni Made, AA, & Suardana, KA (2018). The Influence of Regional Original Revenues, Balancing Funds, and Other Legitimate Regional Revenues on Regional Expenditures. *Udayana University Accounting E-Journal* , 877-904.

[13] Panjaitan, RY (2021). Factors Affecting Regional Expenditures in the City Government of Tebing Tinggi. *Journal of Management* , 65-74.

[14] Pradipta, WT, & Jatmiko, B. (2018). The Influence of the Flypaper Effect, Regional Original Income (Pad) and Gross Regional Domestic Product (Pdrb) on Regional Expenditures (Empirical Study of Provinces in Indonesia in 2014-2016). 171-185.

[15] Pratiwi, EN (2019). Factors Affecting Regional Spending in Bangka Belitung. 1-127.

[16] Solikin, A. (2018). Government Spending And Economic Development (Wagner's Law) In

Developing Countries: A Systematic Review. *Artha Info Journal* , 65-89.

[17] Sutiono, F. (2018). The Influence of Government Spending on Income Inequality in East Java (Case Study of Regencies/Cities in East Java 2010-2015). 1-9.

[18] Wahyuningsih, T. (2019). *Public Economics.* Depok: Pt Raja Grafindo Persada.

[19] Yulinchton, MR, Ariani, MB, & Triwahyuningtyas, N. (2022). Analysis of Local Government Financial Performance: Case Studies in Tegal Regency for the 2016-2019 Period. *Maksipreneur Journal: Management, Cooperatives, and Entrepreneurship* , 303-314.

[20] Zulfian, A. (2019). Analysis of Gross Regional Domestic Product of Paser Regency. 1-69.