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ANALYSIS IMPACT OF GROSS REGIONAL DOMESTIC PRODUCT, GOVERNMENT EXPENDITURE, POPULATION ON REGION OWN-SOURCE REVENUE IN BATAM

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Abstract

The development activities in a region cannot be separated from participation of local government in utilizing available resources. Locally generate income as one reception area reflects the degree of local autonomy. Potential tax and retribution are withdrawn by local government greater than provincial government. This research aimed to analyse the influence of Gross Regional Domestic Product, population and government expenditure to locally generate income in Batam. In this research data used is from secondary data, by using quantitative analysis Ordinary Least Squares method

This research use Eviews 4 program, which result value of prob.t independent variable for the Gross Regional Domestic Product (0.0000) is significant effect on the dependent variable locally generate income. Similarly independent variables of population with a value prob. t (0.0207) significant effect on the dependent variable locally generate income. Independent variables of government expenditure is not significant effect on the dependent variable because the value prob. t (0.0688) greater than (0,05) so it can be said that the independent variables local government expenditure does not significantly influence the dependent variable Locally generate income.

The value of R-square magnitude of 0.9364 indicates that the proportion influence of variable Gross Regional Domestic Product, Government expenditure and Population to variable locally generate income revenue of 93.64 means that the Gross Regional Domestic Product, government expenditure and Population has an influence on the proportion of revenue of 93.64%, while the remaining 63.6% influenced the other variables.

1. INTRODUCTION

Local revenue (PAD) as one of regional revenue reflects the level of regional financial independence. The greater the PAD indicates that the region is capable of implementing fiscal decentralization and its dependence on central government is reduced. The policy of decentralization and regional autonomy is regulated by Law no. 32 of 2004 which regulates local government and Law no. 33 of 2004 on the financial balance between the central government and local governments. Therefore, it is reasonable if PAD is used as one of the benchmarks in the implementation of regional development, but the PAD is still not enough to finance the development when viewed from the proportion of PAD to APBD. In addition to relying on PAD in financing regional development expenditures, districts / cities in

Indonesia also rely on regional revenue sources derived from the central form of balancing funds to increase local revenue.

Economic growth has an impact on the increase of the Local Revenue (PAD) where PAD is ideally the main source of local government costs to carry out development in the region. Areas with positive economic growth are likely to gain an increase in PAD. This should make local governments more concentrated on empowering local economic power to create economic growth.

Saragih (2003) states that any change in economic conditions will have a significant impact on PAD change, a region with a good economy will have a high PAD. Thus it can be said that the better the economic conditions of a region will support the increase in PAD, meaning that the regional economy positively affect the PAD.

The higher the economic growth of a region, the greater the ability of the local people to finance their routine expenditures and government development expenditures. It can be said that the higher the economic growth of a region, the greater the potential of revenue sources of the area. Furthermore, it will increase people's ability to pay increased taxes.

Government spending is part of the fiscal policy that is the government's action to regulate the economy by determining the amount of government revenue and expenditure. Government expenditures produce the products needed to improve the economic progress. The process of economic activity in the community will increase PAD for local government. Economic activity in society will also increase income then increase consumption, and ultimately will increase PAD.

Adam Smith (cited by Santosa and Rahayu, 2005) explains that, with the support of empirical evidence, high population growth will be able to increase output through increasing levels and market expansion in both domestic and foreign markets. Santosa and Rahayu (2005) say, the high population increase accompanied by technological changes will encourage savings as well as the use of economies of scale in production. The addition of the population is one

thing that is needed and not a problem, but as a crucial element that can spur development and economic growth. The amount of income can affect the population. If the population increases, then the revenue that can be withdrawn by the government will also increase.

Batam's growth is felt very fast, especially in industrial sector which growth faster than other sector, it is in harmony with the purpose of development of Batam City one of them as development area of industry. The number of investments made in Batam City has a positive impact on the development of other sectors that are able to encourage growth and development in Batam. The rapid growth is followed by a substantial population growth rate every year, which is an average of 1% per year which up to 2015 amounts to 1,130,428 people.

Economic growth and increasing numbers of people are expected to give effect to the regional revenue to carry out development in the city of Batam. In line with this, regional government expenditure, which is part of fiscal policy, should encourage community participation in enhancing local revenue. Based on that, the researcher interest is to analyse the influence of PDRB, government expenditure and the number of population to region's local revenue in Batam City.

Table. 1
Development of Original Regional Income (PAD), GDP Price Applicable, Regional Expenditure (millions of rupiah) and Total Population Batam City Annual Period 2006 – 2016

Year	Regional Income	GDRB	Regional Expenditure	Population
2006	95,247.20	29,229,330.43	618,890.22	685,787.94
2007	107,559.06	33,022,714.28	894,097.60	713,960.00
2008	142,394.63	38,264,217.84	882,021.15	727,878.00
2009	154,375.85	40,892,290.73	1,139,071.72	899,944.00
2010	159,012.96	63,640,191.40	1,291,092.29	922,371.00
2011	325,551.39	74,181,300.30	1,196,705.06	1,056,701.00
2012	413,178.93	83,751,112.90	1,378,395.21	1,137,894.00
2013	606,340.45	96,661,045.00	1,675,134.48	1,235,651.00
2014	779,944.84	107,213,021.30	1,967,612.95	1,135,412.00
2015	836,713.86	121,130,808.70	2,153,576.70	1,030,528.00

II. FORMULATION OF THE PROBLEM

From the above description, the authors take a problem formulation as follows:

1. What is the high GDP of Batam City affect the PAD of Batam?
2. Does Batam City Government Expenditures that rise annually affect the PAD of Batam City?
3. Does Batam City Population continue to experience increase each year affect the PAD Batam?

III. RESEARCH PURPOSES

Based on the formulation of the issues presented, the purposes of this study are:

1. Analyzing the effect of PDRB on Local Revenue in Batam City.
2. Analyzing the influence of Government Expenditure on Local Revenue in Batam City.
3. Analyzing the influence of the population to the original income in the city of Batam.

IV. BENEFITS OF RESEARCH

The usability of this research is as follows: 1.

As reference materials for further researchers in conducting similar research and thought contribution about regional economic development.

2. As an input and recommendation material for policy makers, especially local governments associated with Local Revenue in an effort to encourage regional economies so as to achieve fair and prosperous welfare.

V. THEORETICAL FRAMEWORK

Gross Domestic Product (GDP), or at the regional level called Gross Regional Domestic Product (GRDP), is the number of final goods and services produced by an economy in one year. High economic growth reflects productivity volumes and outputs are also high. This will in itself create new jobs that will reduce unemployment and increase community incomes.

Furthermore, the increase in people's incomes will make the purchasing power of people rises, impacting on the increase in the level of product offerings. Supply of high service goods result in increasing production of goods

and services, which will then increase the amount of Gross Regional Domestic Product (GRDP) in a region. High GDP reflects the amount of taxes and user charges that local governments can attract in the end resulting in higher local revenue (PAD). So it can be said that the size of GRDP in a region has an impact on the amount of PAD in the area.

Government spending reflects government policies to improve people's welfare. The government must provide public goods, since no private sector is willing to provide the goods that people enjoy. Government activity will shift from provision of means to expenditures for social activities that can ultimately increase economic activity, in which case local governments may impose local taxes and levies that affect the revenue or PAD of the area.

Based on the theoretical basis and study of previous research, and then compiled a frame of thought theory about the research to be done. The framework of theory can be seen in Figure 1.

Based on the above framework the Gross Domestic Product at the regional scale can be used as a better gauge of economic growth because it more accurately reflects the well-being of a country or region, or also referred to as GDP or average GRDP (Nugreheni in Prasetyo, 2010). So it can be said that the higher per capita income of an area will enhance the regional economic activity and the greater the potential of revenue sources of the area.

Sadono Sukirno (2004) Implementation of regional development is a program that requires the involvement of all elements of one layer of society. The role of government in development is as a catalyst and facilitator would need various supporting facilities and facilities, including the budget in the framework of implementation of sustainable development. These expenditures are partly used for development administration and partly for development activities in various important types of infrastructure. These expenditures will increase aggregate spending and enhance economic activity. With the increase of economic activity, the flow of government revenue through PAD also increased.

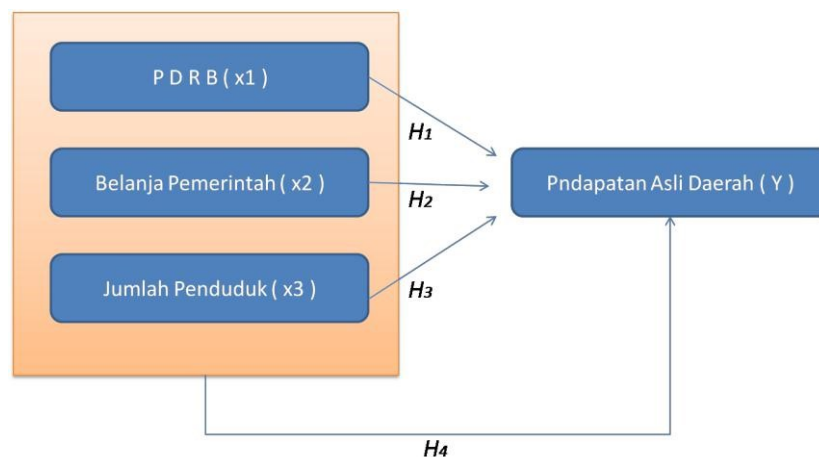


Figure 1
Framework Theory

VI. HYPOTHESIS

The hypothesis is a temporary answer to the question posed in the formulation of the problem to be verified. Based on the formulation of the problem, theory, concept, and framework previously presented, the hypothesis that will be proposed in this research are:

1. Gross Regional Domestic Product (PDRB) has a positive effect on Local Revenue Receipts in Batam City.
2. Government Expenditures Positive Influence on Local Revenue Receipts in the City of Batam, if Government Expenditures in Batam City has increased the Batam Area Revenue Batam will increase.
3. The numbers of residents positively affect the Revenue of local income in the Batam City; if the number of Batam City Population has increased then Revenue Original Batam City will increase.

VII. RESEARCH METHODS

1. Type of Research

In this research, the method used is data collection method, where data is taken from the share of competent sources in issuing the required data. Thus it can be said that this research is a quantitative research, which examines and analyzes a problem based on existing data and previous research.

2. Type and Data Sources

The type of data used in this study is quantitative data and data sources used are secondary data that is in the form of Time series data per quarter in each year. The data used in this study were obtained from several sources, among others:

- 2.1. Data Original Revenue Data (PAD) Batam City period 2005 - 2015 sourced from Book Batam In Figures and Bapelitbang Batam City.
- 2.2. Data PDRB Batam city on the basis of current prices in the period of 2005 -2015 sourced from Book Batam In Figures and Bapelitbang Batam City.
- 2.3. Data Population Batam City period of 2005 - 2015 sourced from Book Batam In Figures and Bepelitbang Batam City.
- 2.4. Data Batam City Government Expenditure period 2005 - 2015 sourced from Book Batam In Figures and Bepelitbang Batam City.

Due to limitations in obtaining data, data on certain variables authors do interpolation data. Data interpolation is a method of splitting data into quarterly or quarterly data, in which the one-year data is divided into four data in quarterly form. Here's the data interpolation formula I use;

$$\begin{aligned}
 Y_{t1} &= \frac{1}{4} \{ Y_t - 4,5 / 12 (Y_t - Y_{t-1}) \} \\
 Y_{t2} &= \frac{1}{4} \{ Y_t - 1,5 / 12 (Y_t - Y_{t-1}) \} \\
 Y_{t3} &= \frac{1}{4} \{ Y_t + 1,5 / 12 (Y_t - Y_{t-1}) \} \\
 Y_{t4} &= \frac{1}{4} \{ Y_t + 4,5 / 12 (Y_t - Y_{t-1}) \}
 \end{aligned}$$

VIII. DEFINITION OF OPERATIONAL VARIABLES

The variables used in this study consist of dependent variable and independent variable. The Original Revenue is the dependent variable in this study. While the independent variables are gross regional domestic product, population, and government expenditure. The definitions of operational variables used in this study are:

1. Local revenue
The local revenue of the regions according to BPS is revenue derived by the regions levied according to local regulations in accordance with the laws and regulations, for the purposes of the region concerned in financing its activities. PAD consists of local taxes, user charges, regional government-owned enterprises and separated regional wealth management, and other legally-recognized local revenue (in rupiah).
2. Gross Regional Domestic Product at current prices
GRDP according to BPS is the sum of the net output value (final goods and services) generated by all economic activities, in a particular region calculated using the prevailing prices every year.
3. Government expenditure
Government expenditures by BPS are all regional obligations recognized as deductions in net asset value within the relevant fiscal year (in rupiah).
4. People
Population according to BPS is all persons domiciled in the geographical area of the Republic of Indonesia for 6 months or more and or those who are domiciled for less than 6 months but are determined to remain. (soul).

IX. ANALYSIS TOOLS

Data analysis is the process of simplifying the data into a form that is easier to read and interpret (Singarimbun and Efendi in Sahara, 2004). Analysis tools used in this research is quantitative analysis that is value of data expressed in numerical scale to know change of value of dependent variable that is Local Original Revenue Batam City caused by change

in independent variable in this research, hence method of analysis The digested regression is the ordinary least squares (OLS) method. The equations used are as follows:

$$Y = f_0 + f_1 \partial_1 + f_2 \partial_2 + f_3 \partial_3 + e$$

Where :

Y = Local Original Revenue

F₀ = Constant

F₁ = Coefficient Regression

∂_1 = GRDP

∂_2 = Government Expenditure

∂_3 = Population

e = Error Term

X. RESULTS AND DISCUSSION

1. Classic Assumptions Test

Tests on classical assumptions to be performed include multicollinearity, autocorrelation, normality, linearity and heteroscedasticity. Each test is done one by one. Here are the operational steps:

1.1. Autocorrelation Test

Prob value. $F \neq$ of 0.00000 can also be called the probability value of F arithmetic. Prob Value (calculation result using eviews attached). F count is smaller than the alpha level of 0.05 (5%) so that, based on the hypothesis test, H₀ is rejected which means autocorrelation occurs. Conversely, if the value of Prob. F arithmetic greater than 0.05 it can be concluded there is no autocorrelation.

In addition to using LM Test, can also use Durbin-Watson. Durbin-Watson value has been displayed on the results of calculation eviews (attached) which value 1.902691. This value is commonly called the DW count. DW count This value will be compared to the acceptance or rejection criteria to be made with dL and dU values determined based on the number of independent variables in the regression model (k) and the number of samples (n). The dL and dU values can be seen in Table DW with 5% significance level ($\alpha = 0.05$).

Durbin-Watson table shows that the value dL = 1.338 and the value dU = 1.659 so it can be determined the criteria of whether or not autocorrelation as shown in the picture below.

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	45.70382	Probability	0.000000
Obs*R-squared	29.15537	Probability	0.000000

Test Equation:

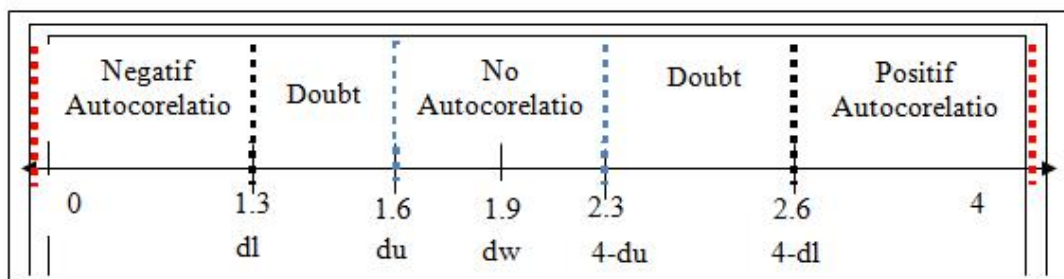
Dependent Variable: RESID

Method: Least Squares

Date: 12/29/16 Time: 13:46

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-138236.7	180380.0	-0.766364	0.4487
PDRB	0.000838	0.000786	1.066527	0.2937
BD	-0.081835	0.049378	-1.657307	0.1067
LPDDK	12175.71	15066.65	0.808123	0.4246
RESID(-1)	0.982989	0.165238	5.948943	0.0000
RESID(-2)	-0.123509	0.184620	-0.668990	0.5080
R-squared	0.728884	Mean dependent var		2.32E-10
Adjusted R-squared	0.689014	S.D. dependent var		17372.86
S.E. of regression	9688.165	Akaike info criterion		21.33268
Sum squared resid	3.19E+09	Schwarz criterion		21.58601
Log likelihood	-420.6536	F-statistic		18.28153
Durbin-Watson stat	1.902691	Prob(F-statistic)		0.000000



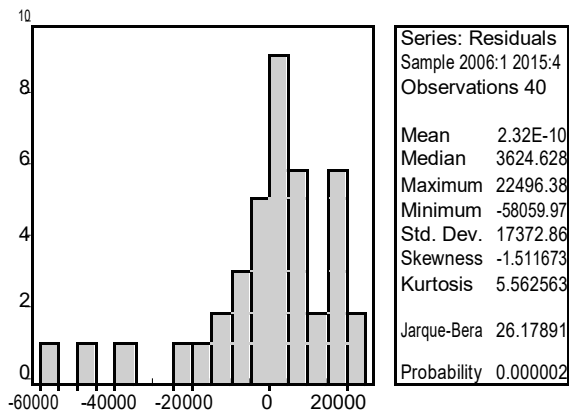
The DW value of the count is 1.902691 greater than 1.659 and smaller than 2.341 which means it is in the area there is no autocorrelation. The results of autocorrelation testing using the approach gives the result of the absence of autocorrelation, so it can be concluded that in the linear regression model that was proposed did not contain autocorrelation. This means that the fulfilment of the classical assumption of linear regression model has been fulfilled.

1.2 Normality Test

The normality test referred to in the classical assumption of the OLS approach is the residual data formed by a normal distributed linear regression model, not the independent

variable or the dependent variable. Testing of residuals is normally distributed or cannot use the Jarque-Bera Test.

The decision is normally distributed or not to the residual simply by comparing the JB probability (Jarque-Bera) with the alpha level of 0.05 (5%). If Prob. JB count is greater than 0.05 it can be concluded that the residual is normally distributed and vice versa, if the value is smaller then there is not enough evidence to state that the residual is normally distributed. Prob value. JB calculated as 0.00002 < 0.05 so it can be concluded that the residual is not normally distributed which means the classical assumption about the normality is not met.



others. Ideally all heteroscedasticity test methods are tried so that we are sure that there is no heteroscedasticity in this linear regression model.

On this occasion only the White Heteroscedasticity Test is simulated only (the other principle is the same). Based on calculations through the tools views obtained, results as follows

Decision on whether or not heteroscedasticity on linear regression model is to see the value Prob. F-statistic (F arithmetic). If Prob value F count is greater than alpha level 0.05 (5%) then H0 is accepted which means no heteroscedasticity occurs, whereas if the value of Prob. F count is smaller than the alpha level of 0.05 (5%) then H0 is rejected which means heteroscedasticity occurs.

Prob value. F arithmetic of 0.000326 is smaller than the alpha level of 0.05 (5%) so that, based on the hypothesis test, H0 is rejected which means heteroscedasticity occurs.

1.3. Heteroscedasticity Test

Heteroscedasticity occurs at the time of residual and the predicted value has a correlation or relationship pattern. This relationship pattern is not only limited to linear relationship, but in different pattern is also possible. Therefore there are several heteroscedasticity test methods owned by EViews, such as: Breusch-Pagan-Godfrey, Harvey, Glejser, ARCH, White and

White Heteroskedasticity Test:

F-statistic	5.806758	Probability	0.000326
Obs*R-squared	20.54261	Probability	0.002216

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 12/30/16 Time: 00:10

Sample: 2006:1 2015:4

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.86E+11	5.12E+11	0.558364	0.5804
PDRB	939.0442	177.9594	5.276732	0.0000
PDRB^2	-2.77E-05	5.66E-06	-4.900476	0.0000
BD	-15062.46	9279.695	-1.623163	0.1141
BD^2	0.040148	0.016183	2.480839	0.0184
LPDDK	-4.21E+10	8.24E+10	-0.510141	0.6133
LPDDK^2	1.49E+09	3.31E+09	0.450731	0.6551

R-squared	0.513565	Mean dependent var	2.94E+08
Adjusted R-squared	0.425123	S.D. dependent var	6.37E+08
S.E. of regression	4.83E+08	Akaike info criterion	42.98513
Sum squared resid	7.69E+18	Schwarz criterion	43.28068
Log likelihood	-852.7026	F-statistic	5.806758
Durbin-Watson stat	1.230747	Prob(F-statistic)	0.000326

1.4. Model Feasibility Test

That the model to be used is as follows:

$$Y = f_0 + f_1 \hat{\alpha}_1 + f_2 \hat{\alpha}_2 + f_3 \ln \hat{\alpha}_3 + e$$

EViews output estimation results are as follows

Dependent Variable: PAD

Method: Least Squares

Date: 12/29/16 Time: 13:09

Sample: 2006:1 2015:4

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	708097.7	320427.2	2.209855	0.0336
PDRB	0.007528	0.001413	5.328269	0.0000
BD	0.152332	0.081203	1.875937	0.0688
LPDDK	-64495.96	26655.66	-2.419597	0.0207
R-squared	0.936424	Mean dependent var		90507.98
Adjusted R-squared	0.931126	S.D. dependent var		68900.99
S.E. of regression	18082.24	Akaike info criterion		22.53789
Sum squared resid	1.18E+10	Schwarz criterion		22.70678
Log likelihood	-446.7578	F-statistic		176.7512
Durbin-Watson stat	0.322361	Prob(F-statistic)		0.000000

1.5. F test (Model eligibility)

Model reliability tests or model feasibility tests or more popularly referred to as the F test (simultaneous test) is the initial stage of identifying the estimated regression model is feasible or not. Worthy (reliable) here means a model that is feasible to be used to explain the effect of independent variables on the dependent variable. The test name is referred to as the F test, as it follows the following F distribution which testing criteria are like One Way Anova.

The use of software makes it easy to draw conclusions of this test. If the value is prob. F count is smaller than the 0.05 (alpha) error rate (predetermined) then it can be said that the estimated regression model is feasible, whereas if the prob. F calculated greater than the error rate of 0.05 then it can be said that the estimated regression model is not feasible.

F test results can be seen in the table in the calculation using eviews (attached). Prob value F (Statistic) of 0,00000 is smaller than the 0.05 significance level so it can be concluded that the estimated regression model is feasible to be used to explain the effect of GRDP, BD (Regional

Expenditure) and PDDK (Total Population) to dependent variable PAD (Local Revenue).

The t test in multiple linear regressions is intended to test whether the parameters (regression coefficients and constants) suspected to estimate multiple linear regression equations or models are appropriate parameters or not. The exact intent here is that the parameter is able to explain the behaviour of the independent variable in influencing the dependent variable. The parameters estimated in linear regression include intercepts (constants) and slopes (coefficients in linear equations). In this section, the t test is focused on the slope parameter (regression coefficient) only. So the t test in question is the regression coefficient test.

T test results can be seen in the table above. If the value is prob. T arithmetic (shown on Prob.) Is smaller than the 0.05 (alpha) error rate (predetermined) then it can be said that the independent variable has a significant effect on the dependent variable, whereas if the prob. T arithmetic greater than the error rate of 0.05 then it can be said that the independent variable has no significant effect on the dependent variable,

from the results of calculation using eviews above can be concluded that;

- a. Prob value. T count of free variable (PDRB) equal to (0,0000) smaller than 0,05 so that independent variable (PDRB) have significant effect to dependent variable (PAD) at alpha 5% or in other words, PDRB in Batam have a significant influence To PAD in Batam City at 95% confidence level.
- b. Similarly, the effect of free variable population Log (PDDK) to the dependent variable (PAD), because the value of prob. T count (0.0207) smaller than 0.05 so it can be said that the independent variable of Log population (PDDK) has significant effect on the dependent variable (PAD) at alpha 5% or in other words, the population of Log (PDDK) Significant to the Batam City's Original Revenue at 95% confidence level.
- c. For the influence of free variable Expenditure Area (BD) to the dependent variable (PAD), because the value of prob. T count (0.0688) greater than 0.05 so that it can be said that the free variable of Regional Expenditure (BD) has no significant effect on the dependent variable (PAD) at alpha 5% or in other words, Batam Municipality value does not significantly Batam City Original Revenue at 95% confidence level.

1.6. Coefficient of Determination Test

The coefficient of determination describes the variation of the influence of the independent variables on the dependent variable. Or it can also be said as the proportion of the influence of all independent variables on the dependent variable. The coefficient of determination can be measured by R-Square or Adjusted R-Square value. R-Square is used when the free variable is only 1 (usually called Simple Linear Regression), while Adjusted R-Square is used when more than one independent variable.

The value of R-Square in the above table is 0.9364 indicates that the proportion of influence of GRDP, BD and Number of Population to PAD variable is 93,64%. This means that GRDP, BD and Population has a proportion of influence on PAD of = 93.64% while the remaining 6.36% (100% - 93.64%) is influenced by other variables that are not in the regression model

1.7. Interpretation

Interpretations of the regression coefficients include two things, signs and quantities. The sign indicates the direction of the relationship. Marks can be either positive or negative. Positive indicates the unidirectional influence between the independent variables on the dependent variable, whereas the negative indicates the opposite effect.

Unidirectional point is, if the independent variable has increase / increase / increase then the dependent variable will experience the same increase / increase / increase. Meanwhile, if the independent variables decrease / decrease it will have an impact on the dependent variable that will decrease / decrease as well. In the opposite direction, if the independent variable has an increase / increase / increase, the dependent variable will experience the opposite of the decrease / reduction. Conversely, if the independent variable decreases / decreases the dependent variable will increase / increase.

The quantity describes the nominal slope of the regression equation. A description of the magnitudes is done on the estimated model example. Consider the log-linear regression (equations) model that has been estimated below:

$$Y = f_0 + f_1 \partial_1 + f_2 \partial_2 + f_3 \text{Ln}\partial_3 + e$$

$$\text{PAD} = 708,097 + 0,01 \text{ PDRB} + 0,15 \text{ BD} + (64,49) \text{ PDDK} + e$$

$$\text{Th} = (2,20) + (5,32) + (1,87) + (- 2,41)$$

$$R^2 = 0,93$$

Interpretation of the above regression equation is:

1. $f_0 = 708,097$ means If ∂_1 (GRDP), ∂_2 (RegionalExpenditure), ∂_3 (Total Population) is equal to 0, the Average Revenue of the Region is 708,097 million rupiah.
2. $f_1 = 0.01$ means that if ∂_1 (GRDP) rises 1 million rupiah then Y (local revenue) increases by 0.01 million rupiah (ceteris paribus)
3. $f_2 = 0.15$ means that if ∂_2 (Regional Expenditure) rises 1 million rupiah then Y (local income) increases by 0.15 million rupiah (ceteris paribus)

4. $f_3 = (64.49)$ means that if ∂_3 (population) rises 1% of the soul then Y (local income) decreased by 64.49 million rupiah (*ceteris paribus*)

PDRB regression coefficient has positive value at the time of PDRB Batam City has increased the original revenue area (PAD) Batam City will also increase. Similarly, when the GRDP decreases then the original income of the city of Batam is also down. The increase of GRDP of 1 million rupiah will increase Batam City's original income by 0,01 million rupiah and vice versa, the decrease of GRDP of 1 million rupiah will decrease Batam City's original income by 0,01 million rupiah. (*Ceteris paribus*)

The regression coefficient of Regional Expenditure (BD) with positive value has the same meaning as the PDRB regression coefficient. At the time of Regional Expenditure Revenue original area (PAD) Batam City will also increase. Similarly, when the Regional Expenditure (BD) down then the original income of the city of Batam is also decreased Increase in local spending of 1 million rupiah will increase local revenues of 0.15 million rupiah and vice versa, the decrease in Regional Expenditure (BD) of 1 million rupiah Will lower the original revenue downtown Batam area of 0.15 million rupiah. (*Ceteris paribus*)

Regression coefficient Total population (PDDK) is negative. At the time of the total population (PDDK) rose Local revenue (PAD) Batam City will decrease. Similarly, when the number of residents (PDDK) decreases then the original income area of Batam will rise. The increase of the population (PDDK) of 1 percent will decrease the local income by 64.49 million rupiah and vice versa, the decrease of the population of 1 percent will increase the original income of Batam City by 64.49 million rupiah (*ceteris paribus*)

XI. CONCLUSION

The results of the analysis show some important empirical evidence, among others:

1. The results of the hypothesis test show that regional economic growth (PDRB) has a significant impact on increasing PAD. Seeing the condition and geographical

position of Batam city that is strategic for Batam economic growth should be more biased improved in order to increase revenue PAD Batam. Related to PAD, the acceptance of which is the mainstay is levies and local taxes. The high retribution may be an indication of the increasing willingness of the government to provide better quality public services.

2. Hypothesis test results also show that the Regional Expenditure has a positive and significant impact on PAD and economic growth. Regional expenditure is directed to sectors that are directly enjoyed by the public, the public gets excellent service and the government gains the community's trust in managing regional expenditure. This condition makes people's concern in paying higher taxes and retribution which will ultimately have an impact on increasing PAD.
3. But the results of the hypothesis test show that the population does not give a positive and significant impact on PAD. This is not in accordance with the initial hypothesis which states that the variable Number of Population Positive Influence on local revenue Area of Batam City, if the number of Batam City Population has increased then Batam Local Revenue will also increase.
4. In the case of hypotheses on the variable population (PDDK) this writer can convey that there is inconsistency data on the number of population data in Batam. The number of people who should increase every year there is a very significant decline in 2014 and 2015, where in 2013 the population of 1,235,651 people fell in 2014 to 1,135,412 people then in 2015 fell again to 1,030,528 inhabitants . The decline in the population is due to a circular letter from the Ministry of Internal Affairs to the local government to re-register the population and the result there are citizens who have multiple citizenship data (ID), the elimination of double ID card to make the population data in Batam becomes reduced. This is what makes the results of hypothesis testing of variable population (PDDK) to be insignificant.

XII. THEORETICAL IMPLICATIONS

This research is basically a development of previous research. Research results are developed in a more comprehensive model using simultaneous testing (the direct and indirect effects of a variable with another variable). Some important findings - according to the author - can make an important contribution to the development of theory or as a reference for further research. Some of the findings are as follows:

1. The results show that decentralization has a significant impact on regional economic growth. This finding is in line with the findings of Oates (1995), Lin and Liu (2000) which attest to a positive and significant relationship between fiscal decentralization and economic growth. These results support a synthesis that suggests that greater autonomy provides an opportunity for regions to more efficiently allocate local potentials for the benefit of public services (Lin and Liu, 2000; Mardiasmo, 2002; Wong, 2004).
2. Economic growth has a positive impact on increasing PAD. The findings of this study are consistent with Saragih (2003) which states that increasing PAD is actually an excess of economic growth. This finding is also in line with Bappenas (2000) stating that, PAD growth should be sensitive to the increase in GRDP
3. Other research results that are in line with previous studies are linked to the relationship between development spending and economic growth. The research findings are very much in line with Wong (2002) which indicates a positive contribution to PAD when the government does development. This result also supports Lin and Liu (2000) succeeded in proving a strong correlation between the shares of investment spending with the level of decentralization.

XIII. SUGGESTIONS FOR RESEARCH

This research has several limitations and possibilities for the development of research as follows:

1. This research uses sample in Batam City. Therefore, the generalization might be low. Nevertheless, this study can be expanded by using sample areas in Batam City. This inherent characteristic difference can be used as a reference to make comparisons related to economic growth, expenditure allocation, and PAD performance
2. This research does not give a detailed description of which sector of spending contributes greatly to both PAD and economic growth. Further sectoral analysis is needed to obtain an overview, which sector can increase the greatest revenue and vice versa. Wong (2002) conducted this analysis by sorting development spending by sector and looking at its impact on economic growth.
3. Data growth in the era of decentralization is the data from 2006 to 2015, so it does not necessarily provide a more comprehensive picture associated with economic growth. However the impact of this decentralization policy will be more pronounced when using data over a longer period of time.

REFERENCE

- Adi, Priyo Hari. 2005. *Dampak Desentralisasi Fiskal Terhadap Pertumbuhan Ekonomi*. Jurnal Kritis. Universitas Kristen Satya Wacana. Salatiga
- Batam Dalam Angka 2005 – 2015 , terbitan Bapelitbang Kota Batam , Pemerintah Daerah Kota Batam
- BAPPENAS. 2003. *Peta Kemampuan Keuangan Propinsi Dalam Era Otonomi Daerah : Tinjauan Atas Kinerja PAD dan Upaya yang dilakukan Daerah*. Direktorat Pengembangan Otonomi Daerah.
- Brodjonegoro, Bambang dan Jorge Martines Vasques. 2002. *An Analysis of Indonesia's Transfer System : Recent Performance and Future Prospect*. George State University. Andrew Young School of Policy Studies. Working Paper.
- Ferdinand, Augusty. 2002. *Structural Equation Modeling dalam Penelitian Manajemen*. Badan Penerbit UNDIP. Semarang.
- Ghozali, Imam dan Fuad. 2005. *Structural Equation Modelling (Teori, Konsep dan*

- Aplikasi dengan Program LISREL 8.54*.
Badan Penerbit UNDIP. Semarang.
- Hair, Jr., R.E. Andersen dan W.C Black. 1998.
Multivariate Data Analysis. Prentice Hall
International. New Jersey. Edisi 5
- Halim, Abdul. 2001. *Analisis Deskriptif
Pengaruh Fiscal Stress pada APBD
Pemerintah Kabupaten dan Kota di Jawa
Tengah*. KOMPAK. STIE YO. Yogyakarta.
Hal:127-146
- Lewis, Blane D. 2003. *Some Empirical Evidence
on New Regional Taxes and Charges in
Indonesia*. Research Triangle Institute.
North Carolina. Working Paper.
- Lin, Justin Yifu dan Zhiqiang Liu. 2000. *Fiscal
Decentralization and Economic Growth in
China*. Economic Development and
Cultural Change. Chicago. Vol 49. Hal : 1 –
21.
- Majidi, N. 1997. *Anggaran Pembangunan dan
Ketimpangan Ekonomi Antar Daerah*.
Prisma. LP3ES. Vol. 3. Hal : 3-22.
- Mardiasmo. 2002. *Otonomi dan Manajemen
Keuangan Daerah*. Penerbit ANDI.
Yogyakarta.
- Oates, Wallace E. 1995. *Comment on “Conflict
and Dilemmas of Decentralization” by
Rudolf Holmes*. The World Bank Research
Observer. Hal : 351 – 353.
- .Saragih, Juli Panglima. 2003. *Desentralisasi
Fiskal dan Keuangan Daerah dalam
Otonomi*. Penerbit Ghalia Indonesia.
- Schwalle, Daniel P. 1999. *The Impact of
Intergovernmental Grants on The
Aggregate Public Sector*. Southern
Economic Journal. Hal : 57 – 58.
- Sidik, Machfud, Raksaka Mahi, Robert
Simanjuntak dan Bambang Brodjonegoro.
2002. *Dana Alokasi Umum : Konsep,
Hambatan dan Prospek di Era Otonomi
Daerah*. Penerbit Buku Kompas. Jakarta.
- Sidik, Machfud. 2002. *Optimalisasi Pajak
Daerah dan Retribusi Daerah Dalam
Rangka Meningkatkan Kemampuan
Keuangan Daerah*. Wisuda Angkatan XXI
STIA LAN Tahun Akademik 2001-2002.
Orasi Ilmiah.

