



The Effect Of Regional Original Income (Pad) and Resistance of Budget Financing (SiLPA) on Economic Growth with General Allocation Fund (Dau) As Moderating Variables in Regency/City Governments In 2011-2015 North Sumatra Province

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received Aug 25, 2024 Revised Sep 15, 2024 Accepted Sep 30, 2024</p> <p>Keywords:</p> <p>Regional Income Surplus Budget Financing General Allocation Fund Economic Growth</p>	<p>This study aims to identify and analyze whether revenue (PAD) and Surplus Financing Articles (SiLPA) effect on economic growth by the General Allocation Fund (DAU) as moderating variables. The study population was the District / City in the province of North Sumatra. The method of this thesis is a descriptive statistical analysis, classic assumption test, test hypotheses and residual test. Independent variables in this study is revenue (PAD) and Surplus Financing Articles (SiLPA), while the dependent variable is economic growth and moderating variable is the General Allocation Fund (DAU) with Total population of this research are 33 districts / cities using purposive sampling obtained 18 districts / cities as samples from 2013 to 2015. the type of data used is secondary data. The results of this study demonstrate that, in the original income (PAD) and Surplus Financing Articles (SiLPA) have a significant effect on economic growth at the Regency / City in the province of North Sumatra. In partial revenue (PAD) has a significant effect on economic growth, while Budget Financing Surplus (SiLPA) has no effect and no significant effect on economic growth in the Regency / City in the province of North Sumatra. General Allocation Fund (DAU) can moderate revenue (PAD) on economic growth, while the financing Budget Surplus, DAU can not moderate relations to economic growth. while Budget Financing Surplus (SiLPA) has no effect and no significant effect on economic growth in the Regency / City in the province of North Sumatra. General Allocation Fund (DAU) can moderate revenue (PAD) on economic growth, while the financing Budget Surplus, DAU can not moderate relations to economic growth. while Budget Financing Surplus (SiLPA) has no effect and no significant effect on economic growth in the Regency / City in the province of North Sumatra. General Allocation Fund (DAU) can moderate revenue (PAD) on economic growth, while the financing Budget Surplus, DAU can not moderate relations to economic growth.</p>

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1. INTRODUCTION

Economic growth is the process of changing the economic conditions of a country on an ongoing basis towards a better state over a certain period. Economic growth can also be interpreted as a process of increasing the production capacity of an economy which is manifested in the form of an increase in national income. The economic growth of a country can be measured by comparing the current year's Gross National Product (GNP) with the previous year. Their economic growth is an indication of the success of economic development. Economic growth is the process of changing the

economic conditions of a country on an ongoing basis towards a better state over a certain period. Economic growth can also be interpreted as a process of increasing the production capacity of an economy which is manifested in the form of an increase in national income. The economic growth of a country can be measured by comparing the current year's Gross National Product (GNP) with the previous year. Their economic growth is an indication of the success of economic development.

The Indonesian economy in the first quarter of 2015 compared to the previous quarter decreased by 0.18 percent. From the production side, this growth was marked by seasonal factors in the Agriculture, Forestry and Fisheries Business Fields which grew 14.63 percent. Meanwhile, in terms of expenditure, this was due to the contraction in investment performance (minus 4.72 percent) and exports (minus 5.98 percent). Regional Original Income (PAD) is one of the determining elements in regional development. This is because PAD is a source of revenue that is managed and obtained through the district and city governments' own efforts by utilizing all the potential that exists in the area. Ideally, all local government expenditures can be met by using PAD so that the regions become truly autonomous. This strong PAD structure is actually the main barometer of the successful implementation of regional autonomy. Apart from PAD to finance its activities, the local government can also take advantage of the Excess Budget Financing (SiLPA) of the previous year. SiLPA is the difference between the realization of budget revenues and expenditures during one budget period. In the 2012 DIPA handover ceremony at the State Palace, President Susilo Bambang Yudhoyono said that infrastructure development in Indonesia was not satisfactory and wanted the remaining budget not to be used for purposes that were not clear but could be used for infrastructure development. From the revenue sector, SiLPA financing is a variable that may affect the size of economic growth in the next fiscal year.

The General Allocation Fund (DAU) is a fund originating from the central government which is allocated for equitable distribution of financial capacity among regions to finance their expenditure needs. The distribution of DAU to all provinces and districts/cities in Indonesia is based on the weight of each region, which is determined based on the needs of the regional autonomy area and regional economic potential. The development of facilities and infrastructure by local governments has a positive effect on economic growth. With the addition of infrastructure and improvement of existing structures by local governments, it is hoped that it will spur regional economic growth. Local governments tend to have a high dependence on central government assistance and budget for increased spending aimed at increasing the capacity of local governments to increase PAD. So that the purpose of this study is to determine the effect of Regional Original Revenue (PAD) and Remaining Budget Financing (SiLPA) on economic growth in the districts/cities of North Sumatra in 2011-2015 simultaneously and partially and to determine whether the General Allocation Fund (DAU) can moderating Regional Original Income (PAD) and Budget Financing Excess (SiLPA) on economic growth in North Sumatra regencies/cities in 2011-2015

2. RESEARCH METHOD

2.1 Types of research

This type of research was conducted based on associative research. Associative research is research that aims to determine the relationship between two or more variables. In this study, researchers want to analyze the effect of PAD and SiLPA on Economic Growth with the General Allocation Fund (DAU) as a moderating variable in district/city governments in North Sumatra Province.

2.2 Location, Research Time, Population and Sample

This research was conducted in district and city governments in the province of West Sumatra. The time of the study started from September 2016 to January 2017. The population in this study was the district/city government in North Sumatra Province, totaling 33 districts/cities. The sample data was taken using purposive sampling, namely the technique of determining the sample with certain considerations.

2.3 Data Types and Sources

The type of data that will be used in this research is secondary data. The source of data in this study is the district/city government budget report in the province of North Sumatra during 2011-2015 which is accessed from the website of the Directorate General of Fiscal Balance www.djpk.depkeu.go.id and also on the website of the Central Statistics Agency, namely www.bps.go.id.

2.4 Method of collecting data

The data collection method used in this study is documentation, where data is taken indirectly through an intermediary media, namely the internet.

2.5 Operational Definition and Measurement of Variables

a. Operational Definition

The independent variables used in this study are PAD and SILPA. The dependent variable which is the main concern in this study is Economic Growth, while the General Allocation Fund (DAU) is the moderating variable. To avoid confusion of understanding (perceptions) in this study, the operational definitions and limitations are formulated as follows:

- 1) Economic growth
 - 2) Regional Original Income (PAD)
 - 3) Excess Budget Financing (SILPA)
 - 4) General Allocation Fund (DAU)
- b. Variable Measurement Scale

The measurement of the variables used in this study are as follows:

Table 1. Operational Variables

Variable	Variable Definition	Measurement	Measuring Scale
Economic Growth (Y)	Activities in the economy that cause goods and services produced in society to increase and people's prosperity to increase.	GRDP Constant Price 2011-2015	Ratio
Regional Original Income (X1)	Total realization of regional revenue originating from regional original economic sources	Realization of PAD in 2011-2015	Ratio
More Remaining Budget Calculation (X2)	SiLPA according to Permendagri Number 13 of 2006 is the excess of realized budget revenues and expenditures during one budget period. SiLPA is a form of idle local government funds where these idle funds have not been used in spending or financing expenditures.	The amount of this SiLPA can be seen from the post of financing receipts in the Regency / City APBD Realization Report	Ratio
General Allocation Fund (Z)	Funds originating from the APBN allocated from the central government to regional governments with the aim of equitable distribution of financial capacity among regions to finance expenditure needs.	Realization of General Allocation Fund Receipt	Ratio

Source: Researcher processed data, 2017

2.6 Source: Researcher processed data, 2017

The data analysis method used is a statistical analysis model using SPSS. The researcher first tested the classical assumption before testing multiple linear regression and the residual test as a moderator.

a. Classic assumption test

The classical assumption test includes normality, multicollinearity, heteroscedasticity and autocorrelation, which are explained as follows:

1) Normality test

The normality test of the data was carried out with the Kolmogorov Smirnov test, the data distribution was said to be normal if it was significant > 0.05.

2) Multicollinearity Test

A low tolerance value equals a high VIF value (because $VIF = 1/Tolerance$). The cutoff value commonly used to indicate the presence of multicollinearity is the tolerance value 0.10 or the same as the VIF value 10.

3) Heteroscedasticity Test

There are several ways to detect the presence or absence of heteroscedasticity, namely if there is a certain pattern, such as the dots that form a certain regular pattern (wavy spreads and then narrows), then it indicates that heteroscedasticity has occurred and if there is no clear pattern, and the points are spread out. above and below the number 0 on the Y axis, there is no heteroscedasticity.

4) Autocorrelation Test

Run test as part of non-parametric statistics can also be used to test whether there is a high correlation between residuals. If there is no correlation between the residuals, it is said that the

residuals are random or random by looking at the probability value. If the significance > 0.05 with = 5%, it means that the residual is not random and H0 is rejected.

b. Research Hypothesis Testing

Testing the hypothesis of this study using multiple analysis (Multiple Regression Analysis) because it consists of two independent variables and one dependent variable. The regression modal used is:

$$Y = \alpha + \beta^1 X^1 + \beta^2 X^2 + \varepsilon$$

Information :

Y = Economic Growth

□ = Constant

1 = Coefficient of PAD

1 = Coefficient of PAD

X1 = PAD

X2 = SiLPA

□ = error

1) Coefficient of Determination Test (R2)

The test of the coefficient of determination (R2) is used to measure the proportion or percentage of the contribution of the independent variable studied to the variation of the ups and downs of the dependent variable or in other words to test the goodness-fit of the regression model. The value (R2) of the coefficient of determination ranges from 0 to 1 (0 R 2 1). The value of R2 is said to be good if it is above 0.5 because the value of R2 ranges from 0 to 1. The value of R2 is equal to zero (R2 = 0) indicating that there is no influence between the independent variables on the dependent variable. If R2 is getting bigger close to 1, it shows the stronger the influence of the independent variable on the dependent variable and when R2 is getting smaller and closer to zero, it shows the smaller the influence of the independent variable on the dependent variable.

2) Simultaneous Significance Test (Test – F)

This test basically shows whether all the independents included in this model have a simultaneous effect on the dependent variable.

a) The form of the test

$$H_0 : b_1 = b_2 = b_3 = 0$$

b) Decision making criteria

If probability < 0.05, then Ha is accepted and Ho is rejected.

If probability > 0.05, then Ha is rejected and Ho is accepted.

3) Partial Significance Test (t-test)

a) The form of the test

$$H_0 : b_1 \ b_2 \ b_3 = 0$$

This means that PAD and SiLPA partially have no effect on economic growth.

b) Decision making criteria

If probability < 0.05, then Ho is rejected

If the probability > 0.05, then Ho and Ha are accepted.

c. Hypothesis Testing with Moderating Variables

There are three methods used to perform a regression test with moderating variables, namely the interaction test, the absolute absolute difference value test and the residual test. The testing of the moderating variable with the interaction test and the absolute absolute difference value test has a tendency for high multicollinearity to occur between the independent variables and this will violate the classical assumptions.

$$Y = a_1 + b_1 X_1 + b_3 X_3 + b_5 X_1 X_3 + e_1$$

$$Y = a_2 + b_2 X_2 + b_4 X_3 + b_6 X_2 X_3 + e_2$$

Where :

Y = economic growth

a = Constant

b = Regression coefficient

X1 = PAD X2

= SiLPA X3

= DAU

3. RESULTS AND DISCUSSIONS

3.1 Description of Research Object

The object of this research is all regencies/cities in North Sumatra which consists of 33 regencies/cities. After the data is collected, those who are included in the population are selected based on predetermined criteria. From the selection, 18 consisting of 12 districts and 6 cities were sampled or 90 observation data that met the criteria, the data were obtained from the Regional Government Balance Sheet and APBD for 2011-2015 which were published through the website of the Ministry of Finance, Directorate General of Central and Regional Fiscal Balance (www.djpk.kemenkeu.go.id).

a. Descriptive Statistical Analysis

Based on descriptive statistical analysis, the sample description is obtained as follows:

Table 2. Results of Descriptive Statistics Analysis of Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
PAD	90	8.53	14.38	107.287	122.409
SILPA	90	5.78	12.73	100.704	116.113
ECONOMIC GROWTH	90	4.24	9.22	56,807	.72096
DAU	90	12.20	14.24	130,692	.46584
Valid N (listwise)	90				

Source: SPSS Results for Windows

b. Classic assumption test

The research requirements that pass the classical assumption test are data with normal distribution, no multicollinearity, no autocorrelation and homoscedasticity research data (no heteroscedasticity).

1) Normality test

Normality test is important because one of the requirements for parametric-test testing is that the data must have a normal distribution (normally distributed).

a) Graph Analysis

The PP Plot graph, a data is said to be normally distributed if the data points are not skewed to the left or right, but spread around the diagonal line.

b) Statistic analysis

Statistical tests that can be used to test residual normality include the Kolmogorov-Smirnov (KS) non-parametric statistical test.

Table 3. KS Statistical Test Results (Normality Test) One-Sample Kolmogorov-Smirnov Test

		Unstandardized ed Residual
N		90
Normal Parameters	mean	.0000000
	Std. Deviation	.67321116
Most Extreme Differences	Absolute	.089
	Positive	.89
	negative	-.057
Kolmogorov-Smirnov Z		.848
asympt. Sig. (2-tailed)		.468

a. Test distribution is Normal.

Source: SPSS Results for Windows

2) Multicollinearity Test

To determine whether there is multicollinearity in the regression model, it can be seen from the tolerance value and Variance Inflation Factor (VIF). Tolerance can measure the chosen independent variability that is not explained by other independent variables. The tolerance value which indicates the presence of multicollinearity is 0.10 while the VIF value is 10

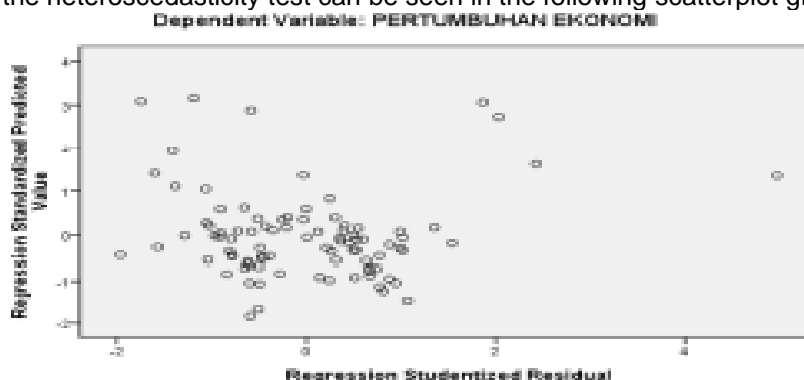
Table 4. Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
	B	Std. Error	Beta	Tolerance	VIF
1 (Constant)	3.061	.826			
PAD	.198	.060	.336	.971	1.030
SILPA	.050	.063	.080	.971	1.030

Source: SPSS Results for Windows

3) Heteroscedasticity Test

The results of the heteroscedasticity test can be seen in the following scatterplot graph:

**Figure 1.** Scatterplot Graph

From the scatterplot graph in Figure 4.3 above, it can be seen that the data points spread randomly and are spread above and below the number 0 on the Y axis. This does not occur heteroscedasticity in the regression model in this study.

4) Autocorrelation Test

The autocorrelation test can be done with the Durbin-Watson test, the Langrage Multiplier (LM) test, the Q statistic test, and the Run Test.

Table 5. Autocorrelation Test Results Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.358a	.128	.108	.68091	1.616

Source: SPSS Results for Windows

c. Hypothesis Testing Results

1. Coefficient of Determination Test (R²)

Table 6. Value of the Model Determination Coefficient Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.358a	.128	.108	.68091

Source: SPSS Results for Windows

2. Simultaneous Significance Test (F-Test)

Table 7. Results of Simultaneous Significance Test (F-Test) ANOVAb

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5.925	2	2.962	6390	.003a
Residual	40.336	87	.464		
Total	46.261	89			

3. Partial Significance Test (t-test)

Table 8. Results of Partial Significance Test (t-test) Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
1 (Constant)	3.061	.826		3.706	.000
PAD	.198	.060	.336	3.303	.001
SILPA	.050	.063	.080	.787	.434

d. Moderating Variable Test – Residual Test

1. The Significance Test of the General Allocation Fund in Moderating the Effect of Regional Original Income on Economic Growth

Table 9. Results of the General Allocation Fund Test in Moderating the Effect of Regional Original Income on Economic Growth Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
1 (Constant)	16,832	.036		4.441	.000
DAU	-1,240	.036	-.801	-3.371	.001
Z_PAD	.036	.008		1.052	4.425

2. Test the Significance of the General Allocation Fund in Moderating the Effect of SiLPA on Economic Growth

Table 10. Significance Test of General Allocation Funds in Moderating the Effect of SiLPA on Economic Growth

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std. Error	Beta		
1 (Constant)	2.034	2,132		.954	.343
DAU	.208	.164	.134	1,265	.209
Z_SILPA	.007	.005	.154	1,452	.150

3.2 Discussion

- a. The Effect of Regional Original Revenue (PAD) and the Remaining Budget Financing (SiLPA) on Simultaneous and Partial Economic Growth

Statistically, the Remaining Budget Financing (SiLPA) has no effect on economic growth. This means that the higher the Remaining Budget Financing (SiLPA) obtained by an area will not increase economic growth in that area.

- b. The Effect of General Allocation Funds in Moderating Regional Original Revenue (PAD) and the Remaining Budget Financing (SiLPA) on Economic Growth

The residual test between PAD and economic growth shows that the parameter coefficient value of DAU is positive and significant. This means that the DAU can partially strengthen or weaken the influence of PAD on economic growth. Likewise, the results of the SiLPA variable residual test on economic growth show that the parameter coefficient values for economic growth are negative and insignificant. This means that the DAU does not partially strengthen or weaken the influence of SiLPA on economic growth.

4. CONCLUSION

Simultaneously, Regional Original Revenue (PAD) and Excess Budget Financing (SiLPA) have a significant effect on Economic Growth in Regency/City Governments in North Sumatra Province. Partially, the Regional Original Income (PAD) variable has a significant positive effect on Economic Growth in Regency/City Governments in North Sumatra Province. Meanwhile, the variable remaining over budget financing (SiLPA)) has no significant and insignificant effect on Economic Growth in Regency/City Governments in North Sumatra Province. The General Allocation Fund variable can moderate the effect of Regional Original Income (PAD) on Economic Growth, while the General Allocation Fund cannot moderate SiLPA on Economic Growth.

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