

ANALYSIS OF THE INFLUENCE OF REGIONALLY GENERATED
REVENUE AND REVENUE SHARING FUND TO INFRASTRUCTURE
EXPENDITURE IN SOUTH SUMATERA, INDONESIA

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ABSTRACT

Regional autonomy is one effort to implement good governance in Indonesia. It makes local governments more independent especially in financial. There are some funding sources for local expenditure, it could be Revenue Sharing Fund (DBH) which is allocated funding from central government or Regionally Generated Revenue (PAD) which is funding derived from local own resources.

This study aims to determine whether Revenue Sharing Fund (DBH) and Regionally Generated Revenue (PAD) have significant influence on infrastructure expenditure in South Sumatera Province, Indonesia. It is obtained by using population data from 2008 to 2012 that is done by noting the documentation available on the report of 4(four) cities and 11(eleven) regencies, also from Finance Ministry Indonesia, and other sources. The analysis uses multiple linear regressions and hypothesis test uses F test for simultaneously and T test for partially with T and F table at 5% level significance.

The result from F test is 22,893 with significance 0,000. Furthermore, from T test, PAD with Infrastructure expenditure has significance 0,075, and DBH with Infrastructure expenditure has significance 0,000. The determination coefficient (Adjusted R Square) is 0,389. It can be concluded that based on partial test the Revenue Sharing Fund (DBH) has a significant effect to the infrastructure expenditure, meanwhile Regionally Generated Revenue (PAD) has not significant effect to infrastructure expenditure. However, based on simultaneous test both have significance influence to Infrastructure Expenditure. So, South Sumatera should increase their own local funding resources.

Keywords: Autonomy, Regionally Generated Revenue (PAD), Revenue Sharing Fund (DBH), and Infrastructure Expenditure.

I. INTRODUCTION

The development of public sector accounting in Indonesia, particularly in the province of South Sumatra growing rapidly along with the presence of a new era in the implementation of regional autonomy and fiscal decentralization. Regional autonomy is the right, authority, and obligation autonomous regions to regulate their own affairs and government and public interests in accordance with laws and regulations. This is in accordance with the general provisions in the Local Government Law 32 of 2004 on Regional Government which has replaced the Law No.22 of 1999. Implementation of government policy on regional autonomy, effectively began on January 1, 2001 which is considered very democratic policies and fulfilling aspects of decentralization. (Maimunah,2008). The purpose of equalization transfers to local governments is to reduce the fiscal gap between the government and ensure the achievement of service standards (Prakoso, 2004). The problem faced by the region generally associated with extracting the sources of taxes and levies, which is one component of the revenue is still not contributing significantly to regional income as a whole (Endrawati, 2010). By implementation regional autonomy, it means that local governments are required to be independent, and also independent in financial matters. Yet the central government still providing aid in form of Revenue Sharing Fund (DBH), which consists of tax revenue and non-tax revenue-sharing (natural resources) are transferred to local government area. Revenue Sharing Fund (DBH) is sourced funds from the state budget revenues generated to the area divided by a certain percentage .

II. LITERATURE REVIEW

2.1. Theory of Agency : it states that agents or local government politicians behave as if they maximize the utility of individuals (voters) of middle-income in the community (Prakoso, 2004). When linked with public spending for a certain period, the agent will allocate its resources based on the expectation of the economic environment in the future. Theoretically it is assumed that all expenditures in a given period depends on the availability of resources during the year, but within the limits of the existing budget rules, such as a balanced budget (balanced-budget rule).

2.2. Revenue Sharing Fund (DBH : Revenue Sharing Fund (DBH) is sourced funds from the state budget revenues that are allocated to regions based on a certain percentage rate to fund the needs of the region in framework of the implementation of decentralization. DBH funding source comes from taxes and natural resources. Here is the DBH sourced from taxes consists of Land and Building Tax (PBB); Customs Acquisition of Land and Building (PHTB) and Income Tax (VAT) of Article 25 and Article 29 of the individual taxpayer. DBH that was acceptance from BPHTB and PBB divided among province, district /city, and Government. Furthermore, DBH sourced from natural resources are from forestry, mining, fisheries, mining, petroleum, mining, natural gas, and geothermal.

2.3. Regionally Generated Revenue (PAD) : Regionally Generated Revenue (PAD) as referred to in Article 3 (a) of Act No. 25 of 1999 on Financial Balance between Central and Local Government, explained that Regionally Generated Revenue (PAD) is the acceptance derived from sources within its own territory,

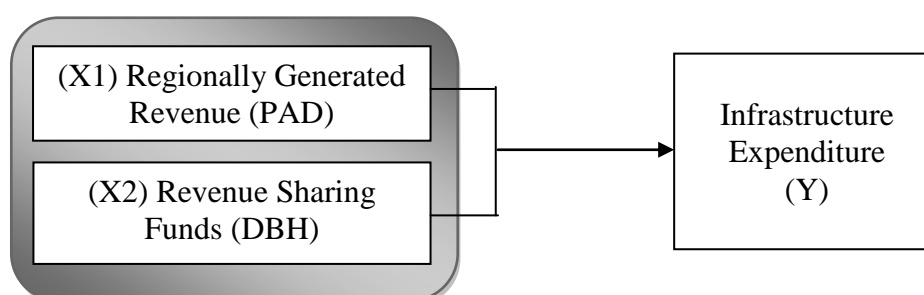
which is collected by local regulations with the legislation in force (Andirfa, 2009). It can be concluded that Regionally Generated Revenue (PAD) is a value of money received from the public/resources within its own territory during the calendar year (calendar), to fund any routine expense, and the rest is used for development costs accordance with the applicable legislation. Under Act No. 22 of 1999 Article 79 states that local revenues consist of : Result from Regional Tax, Result from Retribution, Result from of Regional Owned Enterprise and other areas of separated wealth management, and result from other legitimate income.

2.4. Infrastructure Expenditure : Infrastructure spending is a production/cost used for procurement/ replenishment/replacement, and including expenditures for planning, supervision and management of facilities and infrastructures that increase the capacity of facilities and infrastructures referred to in condition ready to use. The scope of infrastructure spending are transportation, Water and Sanitation, Irrigation, Energy, and Telecommunications

2.5. Research Framework

This research framework as follows:

Diagram 1 : Research Framework



2.6. Hypothesis Research

H1: Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) has significant influence on Infrastructure Expenditure.

H2: Regionally Generated Revenue (PAD) has significant effect on Infrastructure Expenditure.

H3: Revenue Sharing Fund (DBH) has significant influence on Infrastructure Expenditure.

III. RESEARCH METHODOLOGY

3.1 . Source of Data

The data used in this study is secondary data that obtained directly through a website www.djpk.depkeu.go.id. The data used is the source revenue , revenue sharing , and infrastructure expenditure in districts/cities in South Sumatra from 2008 to 2012.

3.2 . Variables

The dependent variable is Infrastructure Expenditure (Y) and the independent variables are Regionally Generated Revenue (PAD) (X1) and Revenue Sharing Fund (DBH) (X2).

3.3 . Population and Sample

The population used in this study are districts / cities in South Sumatra from 2008-2012 . The sample used is the entire county / city consisting of 11 districts and 4 cities in South Sumatra. The cities are Palembang, Pagaralam, Prabumulih, Lubuk Linggau. Moreover, the regencies are OKI, OKU, OKU Timur, OKU Selatan,

Musi Rawas, Musi Banyuasin, Banyuasin, Muara Enim, Empat Lawang, Lahat and Ogan Ilir.

3.4 . Analysis techniques

The analytical tool used is multiple linear regression analysis were used to observe the effect of Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) on Infrastructure Expenditure. Hypothesis testing is performed by using regression analysis model of the independent variable on the dependent variable.

There are three regression equations, regression equation is :

$$Y = a + b_{PAD} + b_{DBH} + e$$

Description:

Y = Infrastructure Spending

b = regression coefficient

PAD = Regionally Generated Revenue

DBH = Revenue Sharing Fund

a = constant

e = error

3.5 . Hypothesis Testing

1. t test (individual test)

T statistical test basically shows how far the influence of the explanatory variables /independent individual in explaining variation in the dependent variable . Testing criteria are:

HO : $\beta = 0$, means that if a dependent variable is not a significant explanatory

variable on the dependent

$H_A : \beta \neq 0$, means that if a dependent variable is not a significant explanatory

variable on the dependent

How to perform a t test is as follows :

- If $t \text{ count} < t \text{ table}$, H_0 is accepted and H_1 is rejected
- If $t \text{ count} > t \text{ table}$, H_1 is accepted and H_0 is rejected

2. Test Statistic F

F test was conducted to test the significance of the independent variables on the dependent variable together . Testing is done by comparing the calculated F with F table at 5 % level of significant test criteria as follows :

$H_0 : \beta_1 = \beta_2 = \dots \beta_k = 0$ means there is no significant effect between all independent variables and the dependent variable.

$H_0 : \beta_1 \neq \beta_2 \neq \dots \beta_k = 0$ means there is a significant relationship between all the independent variables on the dependent variable .

- a. If the $F \text{ calculated} < F \text{ table}$ then H_0 is accepted and H_1 is rejected.
- b. If $F \text{ calculated} > F \text{ table}$ then H_1 is accepted and rejected H_0

IV. RESULTS

4.1. Statistic Data Description

The sample taken was 15 cities/districts that obtained annually. The descriptive statistics are as follows:

Table 5.1
Statistik Deskriptif
(in millions)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BI	75	13749,00	340222,00	123167,9333	62704,63696
PAD	75	5509,00	349569,00	47072,0667	56756,72214
DBH	75	18595,00	2888686,00	336193,0533	419455,51824
Valid N (listwise)	75				

From the table above, it can be explained:

1. The lowest value of Infrastructure Expenditure (Y) is 13749.00 while the highest value is 340,222.00. Average Infrastructure Expenditure (Y) is 123,167.93 and the standard deviation is of 62704.64.
2. The lowest value of PAD (X1) is 5509.00, while the highest value is 349,569.00. Average PAD (X1) is 47072.07 and the standard deviation 56756.72.
2. The Low values of DBH (X2) is 18595.00 while the highest value is 2,888,686.00. Average DBH (X2) is 336,193.05 and the standard deviation is 419,455.52.

4.2. Regression Analysis

The analytical tool used is multiple linear regression analysis. It was used to observe the effect of PAD and DBH on Infrastructure Expenditure. Hypothesis testing is performed by using regression analysis model of the independent variable on the dependent variable that can be seen below:

Table 5.5
Multiple Linear Regression Analysis

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	91229,655	8179,412		11,154	,000
PAD	,019	,107	,017	,173	,863
DBH	,092	,014	,618	6,383	,000

a. Dependent Variable: BI

From the above table it can be seen multiple linear regression equation was (in millions of dollars) :

$$\text{Infrastructure Expenditure} = 91229,655 + 0.019\text{PAD} + 0.092\text{DBH} + e$$

91229.655 is a constant value, which means when the variable PAD and DBH held constant or no change in the magnitude of the variable Y (infrastructure expenditure) is equal to 91229.655. Furthermore, the value of 0.019 at PAD variable (X1) means that when X1 increased by 1 point then Y will increase by 0,019. Moreover, the value of 0.092 at DBH variable (X2) means that when X2 is increased by 1 point then Y will increase by 0.092 .

4.3. Hypothesis Testing

4.1. F test (simultaneous significance test)

F test was conducted to test the significance of the independent variables on the dependent variable together . Testing is done by comparing the calculated F with F table at 5 % level of significant with the test results as follows :

Table 4.1**F-test****ANOVA^a**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1,131E+11	2	56551682717	22,893	,000 ^b
Residual	1,779E+11	72	2470210074		
Total	2,910E+11	74			

a. Dependent Variable: BI

b. Predictors: (Constant), DBH, PAD

Based on the table, it obtained that calculated F value of 22.893 with a probability value (sig) =0.000. Thus the results of the analysis in this study indicates that the independent variable PAD and DBH effect simultaneously (synchronously) on infrastructure spending in the district/city of South Sumatra province 2008-2012 period. So, it can be concluded that H1 that stated PAD and DBH have an influence on Infrastructure Expenditure is accepted .

4.2. T test (significance test of individual parameters)

To determine whether each independent variable, namely Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) partial (individual) effect on Infrastructure Expenditure, then tested the statistical t test results as follows :

Table 4.2
PAD t-test
Coefficients^a

Model	Unstandardized Coefficients		Stndr Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	112404,643	9291,290		12,098	,000
PAD	,229	,127	,207	1,807	,075

a. Dependent Variable: BI

Based on the tests performed, it shows that the variable PAD has significance value of 0.075, which means that these results prove that the PAD is partially does not has effect to infrastructure expenditure due to the significance value >0.05 .

However, for the second variable which is DBH has a significance value of 0.000, so the results prove that DBH partially affect infrastructure expenditure because significant value <0.05 . Hypothesis H3 were expressed DBH has an influence on infrastructure expenditure. The results of the test as follows :

Table 4.3
DBH t-test
Coefficients^a

Model	Unstandardized Coefficients		Stndr Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	91843,593	7325,143		12,538	,000
DBH	,093	,014	,623	6,810	,000

b. Dependent Variable: BI

So, It was concluded that the influence of H2 which states PAD to Infrastructure Spending is rejected because of significant value $0.075 > 0.05$. However, H3 were expressed DBH has an influence on infrastructure spending is acceptable because the significance value $0.000 < 0.05$.

4.4. Coefficient Determinant.

Under the Table " Model Summary ", it can be concluded that the effect of Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) of 38.9 % on Infrastructure Spending, whereas 61.1 % were not influenced by other variables studied . Since the value of R Square below 5 % or tends to approach a value of 0, it can be inferred that the ability of independent variables in explaining the variation in the variables is very limited . The results can be seen from the table below.

Table 4.4
Determinant test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,623 ^a	,389	,372	49701,20797

a. Predictors: (Constant), DBH, PAD

c. Dependent Variable: BI

4.5. Discussion of Results

Simultaneously, all independent variables significantly influence the infrastructure expenditure variables that calculated F value of 22.893 with a significance level of 0.000 which is under 0.05 . It is strengthened with the value of the coefficient of determination (Adjusted R Square) of 0.389 which indicates that the independent variable Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) were able to explain as much as 38.9 % of a change of dependent variables which is infrastructure expenditure . While the remaining 61.1

% is explained by other factors . It was concluded that H1 states PAD and DBH have an influence on Infrastructure expenditure is accepted . The results of this test simultaneously parallel to the research conducted Darwanto (2007) with different dependent variables showed that simultaneously, Economic Growth, Revenue (PAD), and the General Allocation Fund (DAU) have a significant effect on capital expenditures.

Based on the partial test results, variable Regionally Generated Revenue (PAD) does not have significantly affect the infrastructure expenditure variables with a significance level of 0.075 (>0.05), so the conclusion is H2 was rejected. It means that there has been a flypaper when PAD is not significant because it shows that flypaper is defined as a condition that occurs when local governments respond (spending) more by using funds transfer (Maimunah, 2006).

However, variable Revenue Sharing Fund (DBH) significantly affect infrastructure spending variables with a significance level of 0.000 (< 0.05), so it can be concluded that H3 is accepted. This results of partial test is aligned with Maimunah (2006) states that there is a very close relationship between the transfer of Central government with local government spending. Empirically , in the long-term it effect on the transfer of expenditure, specifically it asserts that government policy in the short -term adjusted to transfer received, thus allowing the non - linear and asymmetric responses. It prove that General Allocation Fund (DAU) has a significant impact on regional expenditure.

This study is not in line with research conducted by Kusumadewi (2007) with a different dependent variable , namely the expenditure area, which indicates

that variable Regionally Generated Revenue (PAD) have a significant effect on the dependent variable. The sample was regencies / cities in Indonesia. The P Value t count DAU is smaller than P Value t count PAD. In other words , local governments in setting their expenditure policies is more stimulated by DAU amount received in the current year rather than its own revenue (PAD).

Based on that it means that local government showed unusual behavior, so that they tends to make manipulation of government spending as high as possible rather than maximization of regional owns revenue so they will be able to obtain assistance fund transfers from the central government. Local governments find it is easier to maximize expenditure rather than to maximize revenue. The good thing is local governments should begin to seek and find ways to maximize the potential of their area which will result the increasing revenue. How this should be done because local governments will not always be dependent on central government transfers (Afrizawati, 2012) .

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

From the above results can be concluded as follows :

1. Simultaneously, Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH) showed a significant influence on infrastructure expenditure with F - count equal to 22.893 and has a significant value of 0.000. So we can conclude the results of H1 is accepted .

2. Partially, it can be concluded that Regionally Generated Revenue (PAD) does not have a significant effect on infrastructure spending because significant value is 0,075 so it is > 0.05 . It means that there has been a flypaper when PAD is not significant because it shows that flypaper is defined as a condition that occurs when local governments spend (spending) more by using funds transfer (Maimunah , 2006). The conclusion is H2 rejected, however, DBH have a significant influence on infrastructure expenditure as significant value < 0.05 is 0.000, we conclude H3 is accepted.
3. The coefficient of determinant (adjusted R2) obtained for 0.389 or 38.9 % . This indicates that 38.9 % of infrastructure expenditure is influenced by variable PAD and DBH, but 61.1 % influenced other variables that are not examined .

5.2 Advice

1. This study only covers the districts / cities in South Sumatera , so it is advisable to research taking different samples so that research results can be compared.
2. In future studies should use a more complete and up to date or the latest data..
3. To improve the allocation of local government spending it is expected to continue explore the sources of local revenue (PAD) both intensification and extensification to increase local revenues, as well as local governments to continue to draw Revenue Sharing Fund (DBH) as much as possible.

5.3 Limitations of Research

1. Researchers only take two independent variables namely, Regionally Generated Revenue (PAD) and Revenue Sharing Fund (DBH)
2. This research only for five (5) period from 2008 to 2012.

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