ANALYSIS OF THE EFFECT OF LOCAL REVENUE, AND BALANCE FUNDS ON CAPITAL EXPENDITURE IN ACEH PROVINCE

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ABSTRACT
This study aims to examine the effect of Local Revenue and balance funds on Capital Expenditure. The research uses cross-sections and time series data in 23 regencies/cities in Aceh Province during 2013-2021. Uses the Methodology fixed effect model. The results of this study showed that partially Local Revenue has a negative and insignificant effect on Capital Expenditures, while Balancing Funds has a positive and significant effect on Capital Expenditures. The results of this research showed that simultaneously Local Revenue and balancing Funds have a positive effect on Capital Expenditures.

Keywords: Local revenue, balance fund, capital expenditure

Doi:

Introduction

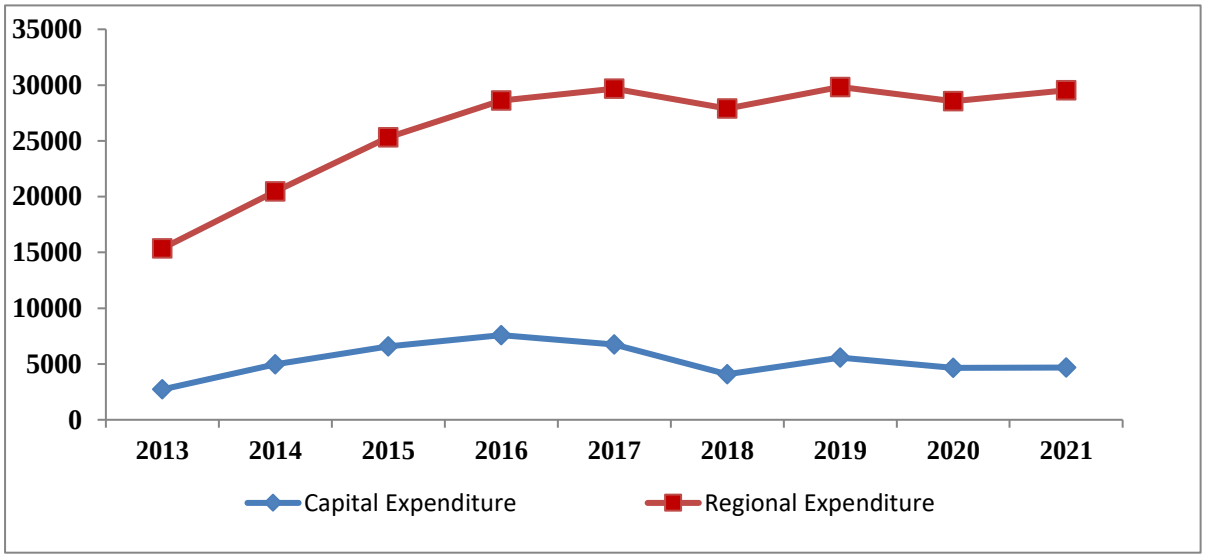
Capital expenditure is a budget expenditure used for the acquisition of fixed assets and other assets that provide benefits for more than one accounting period. Capital expenditure is closely related to long-term financial planning, especially financing for the maintenance of fixed assets resulting from capital expenditure (Priambudi, 2017).

According to the Central Bureau of Statistics of Aceh Province (2021), Capital Expenditure is expenditure used for the purchase/procurement or construction of tangible fixed assets whose useful value is more than a year. The formation of these assets includes the procurement of land, heavy equipment, transportation equipment, workshop equipment, agricultural equipment, office equipment and supplies, computers, furniture, kitchen equipment, room decorators, studio equipment, communication equipment, measuring instruments, medical equipment, laboratory equipment, construction of roads, bridges, water networks, street lighting, parks and urban forests, electricity and telephone installations, buildings, books/libraries, art goods, procurement of animals/livestock and plants, and weapons/security.

Looking at the data on capital expenditure in districts and cities in Aceh Province, it is still considered small when referring to the rules that guide the standard amount of capital expenditure on regional expenditure. The creation of a standard amount of capital expenditure on regional expenditure is regulated in the Minister of Home Affairs Regulation No. 37 of 2012 at 30 percent of regional expenditure. However, what happens in Aceh Province still cannot meet the standard amount set by the government. The following graph below shows a comparison of the value of capital expenditure against regional expenditure in Aceh Province.

Based on Figure 1, it can be seen that the movement of the percentage of capital expenditure on regional expenditure fluctuates, where the highest percentage was in 2016 at 26 percent, while the smallest percentage was in 2018 at only 14 percent. The percentage of capital expenditure on regional expenditure still cannot reach the standards set by the government.

Figure 1
Figure Regional Expenditure on Capital Expenditure

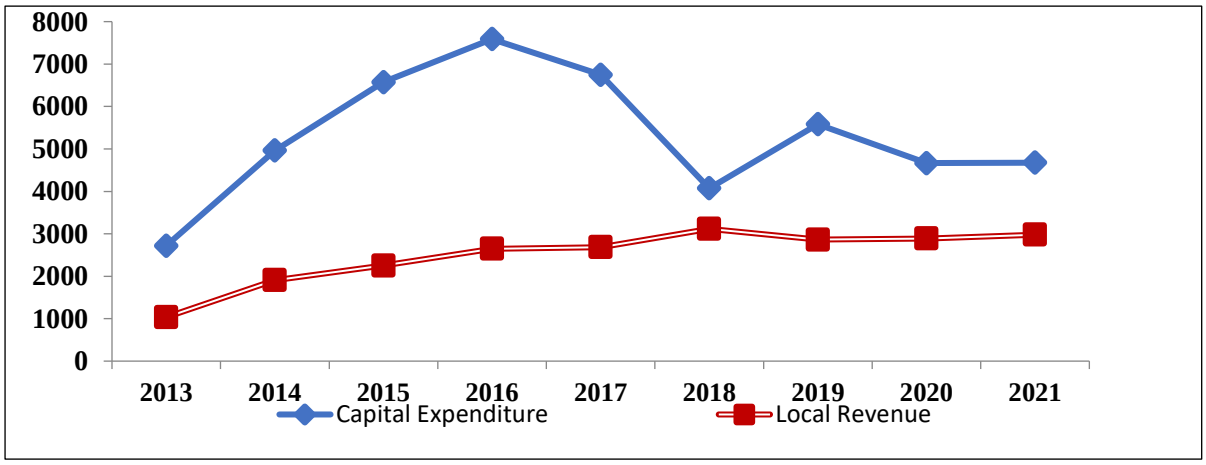


Source: Badan Pusat Statistik, Provinsi Aceh, 2013-2021

Carunia 2017 in Rahayu, (2021) states that local revenue is revenue obtained from sources within its region, the higher the role of local revenue in the regional financial structure, the higher the financial capacity owned by the region to carry out its regional development activities. High local revenue will show the region's ability to meet its own needs and maintain and support the development results that have been implemented and will be implemented (Machfud et al., 2021).

The needs of regional public facilities are funded by local revenue, the source of which comes from the APBD. the revenue capability of each region cannot necessarily be equalized. Aceh Province produces a very small value of local revenue. Aceh Province's own-source revenue during 2013-2021 in all districts and cities reflects a large imbalance.

Figure 2
Figure Local Revenue on Capital Expenditure

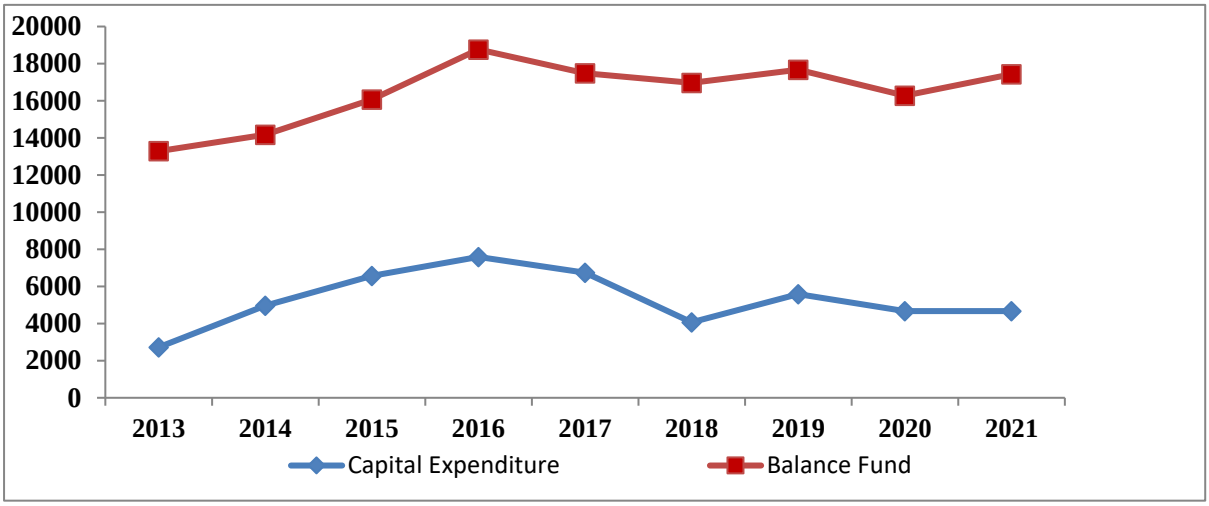


Source: Badan Pusat Statisti, Provinsi Aceh 2013-2021

Based on Figure 2, the graph above provides information on capital expenditure when compared to local revenue, it can be seen that capital expenditure is much higher than local revenue. It can be seen that the capital expenditure of Aceh Province from 2013-2021 has the highest value is

7.5 trillion, while the local revenue of Aceh Province from 2013-2021 has the highest value is 3.1 trillion. The lowest value of capital expenditure of Aceh Province from 2013-2021 was 2.7 trillion, while the lowest value of local revenue of Aceh Province from 2013-2021 was 1.03 trillion.

Figure 3
Figure Balance Fund on Capital Expenditure



Source: Badan Pusat Statistik, Provinsi Aceh, 2013-2021.

Based on Figure 3, the graph above provides information on where capital expenditure is compared to balancing funds. It can be seen that the Balance Fund has the same flow of ups and downs (fluctuations) as Capital Expenditure from 2013-2021. A closer look at the balance fund of Aceh Province from 2013-2021 shows that the highest value is 18.7 trillion, while the highest value of capital expenditure of Aceh Province from 2013-2021 is 7.5 trillion. The balance fund of Aceh Province from 2013-2021 has the lowest value of 13.2 trillion, while the capital expenditure of Aceh Province from 2013-2021 has the lowest value of 2.07 trillion.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Capital Expenditure

According to Darise 2008: 141 (Susanti et al., 2016) suggest that Capital Expenditures are expenditures used for the cost of expenditures made in the context of purchasing and procuring or building materialized fixed assets that have a useful value exceeding the limit of 12 (twelve) months used for government activities, such as in the form of land, equipment and machinery, buildings and buildings, roads, irrigation, and networks and other fixed assets

Types of Capital Expenditure

Based on Government Regulation No. 71/2010 classifies Capital Expenditure into five classifications, including:

1) Land Capital Expenditure
   Land Capital Expenditure is expenditure made for the procurement/purchase/acquisition of transfer of rights and land leases for vacating, stockpiling, leveling, land maturation, making certificates, and other expenditures related to the acquisition of land rights as referred to in the conditions for use.
2) Capital Expenditure on Equipment and Machinery
   Capital expenditure on equipment and machinery is expenditure or expenditure on the purchase, addition, and replacement of equipment and machinery, as well as office inventory that provides benefits for more than 12 months or one year until the equipment and machinery are ready for use.

3) Capital Expenditure on Building and Construction.
   Capital expenditure on buildings and structures consists of the cost of procurement, addition, and replacement as well as the cost of planning, supervision, and management of the construction of buildings and structures that increase the capacity until the buildings and structures are ready for use.
4) Capital Expenditure on Roads, Irrigation, and Networks.
   Capital Expenditures on roads, irrigation, and networks include expenditures for planning, supervision, and management of roads, irrigation, and networks that increase capacity until the roads, irrigation, and networks are ready for use.
5) Other Physical Capital Expenditures
   Other physical capital expenditures are expenditures for the acquisition and maintenance of physical assets that are not included in the five types of capital expenditures. Included in other physical capital expenditures are lease and purchase contracts, the purchase of commodities for museums, animals and plants, books, and scientific journals.

Local Revenue

According to Darise 2008: 25 (Tri, 2018) Local revenue needs to be increased to bear some of the expenditures required for the implementation of government and development activities which increase every year so that the independence of broad, real, and responsible regional autonomy can be implemented.

The existence of local revenue requires creativity in each local government to be a source of funds in the implementation of regional autonomy activities while still seeing the strengths and weaknesses of each region, this is to show a healthy decentralization system.

Local revenue is a source of revenue for each region where the form of function provided by local revenue is very important, meaning that when local revenue experiences fluctuating values it becomes a shock to the region because a very important source of revenue does not have the strength to continue to be improved.

Relationship between Local Revenue and Capital Expenditure

There is a strong relationship between local revenue and the allocation of capital expenditure. This is where local revenue has a significant role in determining the ability of the region to carry out government operational activities and planned development programs. Local governments have the authority to allocate their own-source revenues into the capital expenditure sector, which aims to increase assets for local governments and improve the level of service to the public.

Relationship between Balance Fund and Capital Expenditure

Balancing Funds are funds sourced from the receipt of the State Budget (APBN) which are allocated to the regions to finance regional needs. Financial balance with central government transfer funds to local governments is an incentive for local governments to finance regional expenditures. The results of Sianipar's 2011 research (Dyahnisa, 2021) state that there is a positive and significant relationship between DAU and Capital Expenditure.

As a result, there is a large transfer of funds from the central government to local governments, which can be used to carry out basic service responsibilities in general. Because DAU is part of the balance fund, this reinforces that the balance fund has a positive correlation with capital expenditure, where the balance fund can fund capital expenditure for the procurement of facilities and infrastructure in the region for the public interest.

RESEARCH METHODS

Data and Sample

This type of data is panel data, which is a combination of cross-section data and time series data. Time Series data from 2013-2021 and Cross Section data with 23 Regency/City objects in Aceh Province. Sources of data in Badan Pusat Statistik Aceh Province.

Measures

The object is a problem that becomes the center of the subject matter. The object used in this study is Local Revenue as an independent or independent variable, the Balance Fund as an independent or independent variable, and Capital Expenditure as the dependent variable. The location of this research site is in Aceh Province with a case study of 23 districts/cities.

Data Analysis

The analysis method in this study uses panel data regression. Panel data is a combination of time series and cross-section data.

Fixed Effect Model (FEM)

The Fixed Effect Model (FEM) regression model is a technique that estimates panel data using dummy variables to explain intercept differences. This approach is based on the existence of intercept differences between cross sections but the same between times. This model also assumes that the slope is fixed, as for the model of the fixed effect model is:

$$Y_{it} = \alpha i + \sum_{k=0}^{n} \alpha kdi + B x_{it} + \varepsilon_{it}$$

Between cross-section and between time. The approach used in this model is the Least Squares Dummy Variables (LSDV) method. Regression equation in the fixed effect model, The Fixed effect model assumes that the slope coefficient is constant intercept but the intercept is not constant. The fixed effect model (FEM) model selected in this study, is based on:

Chow Test

Chow text is a test conducted to select the best model between the fixed effect model (FEM) and the common effect model (CEM). The Chow test assumes that there is no change in structure in the restricted residual sun square and unrestricted residual sum square equations.

Hausman Test

To determine the best model between FEM and REM is to use the Husman test. the fixed effect model assumes that the independent variables are correlated with their errors, while the random effect model.

Langrange Multiplier (LM) Test

To test whether the regression model with the random effect model is better than the pooled least square regression model, the LM test is used.

Classical Assumption Test

Normality Test

The normality test is a test that aims to determine whether the independent variables and the dependent variable in this model have a nominal distribution or not. The way to detect it is by using graphical analysis with the Jarquebera-test, namely if the probability is> 5%, then the variables are normally distributed.

Heteroscedasticity Test

The heteroscedasticity test aims to test the model for inequality of variance from one residual to another observation or not. A good model is one with homoscedasticity or no heteroscedasticity. One way to detect the presence or absence of heteroscedasticity is by using the Harvey Test (Havey Test).

Multicollinearity Test

To determine the presence or absence of multicollinearity in a regression model, it is seen by regressing the model with the log residual squared as the dependent variable. If the probability of

each independent variable is more than 0.05 then there is no multicollinearity. Otherwise, the probability of each independent variable is less than 0.05, so multicollinearity occurs.

Statistical Test t (Partial Test)

The t-statistical test will show how far the influence of one independent variable individually in explaining the variation in the dependent variable. In this study to test the hypothesis of the extent to which the influence of the independent variables, namely Regional Original Revenue, and Balance Funds on the dependent variable, namely Capital Expenditure, can be analyzed using the t-test, to see the relationship between each independent variable and the dependent variable.

RESULTS AND DISCUSSION

Research with panel data, based on classical assumption tests, namely:

Multicollinearity Test

Table.1
Result of the Multicollinearity Test

Correlation t-Statistic	LOG(BM)	LOG(PAD)	LOG(DP)
LOG(BM)	1.000000 -----		
LOG(PAD)	0.449679 7.190734	1.000000 -----	
LOG(DP)	0.637796 11.82744	0.762122 16.81295	1.000000 -----

Source: Data processed (2023)

Based on the multicollinearity test, the data in this study is seen from the correlation value between the independent variables of 0.76 <0.80, indicating that there is no indication of multicollinearity.

Heteroscedasticity Test

Table.2
Result of the Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.249549	0.658043	3.418545	0.0008
LOG(PAD)	0.025983	0.037883	0.685879	0.4937
LOG(DP)	-0.330627	0.115291	-2.867774	0.0046
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.145083	Mean dependent var		0.209449
Adjusted R-squared	0.031724	S.D. dependent var		0.169261
S.E. of regression	0.166554	Akaike info criterion		-0.633653
Sum squared resid	5.020990	Schwarz criterion		-0.229785
Log-likelihood	90.26631	Hannan-Quinn critter.		-0.470315
F-statistic	1.279855	Durbin-Watson stat		2.265580
Prob(F-statistic)	0.182961			

Source: Data processed (2023)

Based on the heteroscedasticity test, the probability of the local revenue variable is above (> 0.05), while the probability of the equalization fund variable is below (< 0.05). So, it can be concluded in this study that the variable of local revenue is free from heteroscedasticity, while the variable of balanced funds is not free from heteroscedasticity.

Chow Test

Table.3
Result of Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.056588	(22,181)	0.0000
Cross-section Chi-square	98.693616	22	0.0000

Source: Data processed (2023)

Based on the results of the Chow test, the redundant fixed effect test obtained a chi-square probability value < α 5%, namely 0.0000 < 0.05. This means that the fixed effect model is better to use than the common effect model seen based on the results of this test.

Hausman Test

Table.4
Result of Hausmant Test

Test summary	Chi-sq. Statistic	Chi-sq. D.f.	Prob.
Cross-section random	49.342039	2	0.0000

Source: Data processed (2023)

Based on the Hausman test, the chi-square probability value < α 5% is 0.0000 < 0.05. This means that the fixed effect model is better and more appropriate to use than the random effect model based on the results of this test. This model is the best so there is no need to continue the Lagrange multiplier test.

Tabel.5
Result of Panel Data Regression Results with Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(PAD)	-0.064257	0.065281	-0.984315	0.3263
LOG(DP)	2.187481	0.198673	11.01046	0.0000
C	-8.627870	1.133963	-7.608600	0.0000
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.634553	Mean dependent var		5.350179
Adjusted R-squared	0.586096	S.D. dependent var		0.446119
S.E. of regression	0.287012	Akaike info criterion		0.454754
Sum squared resid	14.91004	Schwarz criterion		0.858623
Log-likelihood	-21.83968	Hannan-Quinn critter.		0.618092
F-statistic	13.09519	Durbin-Watson stat		1.841643
Prob(F-statistic)	0.000000			

Source: Data processed (2023)

Table 5 is the result of the regression data of the panel effect model, that the coefficient value of the local revenue variable is -0.06, which means that if the local revenue of the district/city in Aceh Province increases by Rp. 1,000, it will make a decrease in capital expenditure in 23 district/city of Aceh Province by 0.06% with the assumption that the balancing fund variable is considered constant. The coefficient value of the equalization fund variable of 2.18 means that if the equalization fund increases by Rp 1,000, capital expenditure in 23 districts/cities in Aceh Province will increase by 2.18% with the assumption that the variable level of local revenue is considered constant or fixed.

Furthermore, the t value of local revenue is -0.984 > 2.600 (t table). This means that local revenue has a negative and insignificant effect on capital expenditure in 23 districts/cities in Aceh Province, or it can be seen from the probability value of 0.3263> 0.01. For the Balance Fund variable, the value is 11.010 > 2.600 (t table). This means that the Balance Fund has a positive and significant effect on capital expenditure in 23 districts/cities in Aceh Province.

The value of F statistics> F table is 13.095> 4.71 with a probability of 0.000000 < 0.01, it can be concluded that simultaneously the variables of local revenue, and balance funds in 23 districts/cities have a significant and positive effect on capital expenditures in 23 districts/cities of Aceh Province. This can also be seen from the probability of 0.0000 < 0.01.

Test Coefficient of Determination (R^2 Test)

Table.6
Result of Hausmant Test

R-Squared	Adjusted R-Squared
0.634553	**0.586096**

Based on the results of the determinasi coefficient test (R^2) is adjusted r-squared in this study amounted to 0.5860. This shows that the relationship between the variables of local revenue, balancing funds on capital expenditure in this study is 58.60% and 1-0.586096 = 0.413904 which means that the other 41.39% is influenced by other variables outside of this study.

The Effect of Local Revenue on Capital Expenditure

Based on the results of research that has been tested partially, the variable of local revenue used in the study has a negative and significant effect on capital expenditure. This is not by the initial hypothesis which states that local revenue is expected to have a positive and significant effect on capital expenditures in Aceh province. In line with the research of Tolu et al (2016), namely local own-source revenue hurts capital expenditure, and in contrast to the results of Immah's research (2020) local revenue has a positive effect on capital expenditure. In theory, local own-source revenue is a factor that influences capital expenditure, this is because the local revenue generated can support the cost of capital expenditure for development activities and procurement of assets in the area.

The effect of equalization funds on capital expenditure

The results of panel data estimation show that the balancing fund has a positive and significant effect on capital expenditure in Aceh Province. Balance funds are present as funds sent by the central government to local governments, balance funds are allocated in 3 parts including, special allocation funds, general allocation funds, and revenue sharing funds, in line with the research of Novianto and Hanafiah (2015) balance funds have a positive effect on capital expenditures. In contrast to the results of research by Machfud at., al (2021) the result is that the balance fund hurts capital expenditure.

The general allocation fund can be used to finance capital expenditure if local revenue has not been able to provide funds for capital expenditure, from the role of this balance fund it can take over for capital expenditure financing.

The Effect of Local Revenue, Balance Fund on Capital Expenditure

From the independent or independent variables which are local revenue, and balancing funds on capital expenditures in Aceh Province, the researcher concludes that in the f test or simultaneous test which has been known together with the variables of local revenue, balancing funds has a positive and significant effect on capital expenditures in Aceh province. The value of F statistics evidences this> F table, namely 13.09> 4.71 with a probability of 0.000000 <0.01.

CONCLUSION

Based on the research results and discussion of Local Revenue, Balance Funds on Capital Expenditure in Aceh Province. Then some conclusions can be drawn as follows: Partial testing or t-test of Local Revenue has a negative and insignificant effect on Capital Expenditure in Aceh Province, increasing Local Revenue will reduce Capital Expenditure in Aceh Province. Partial testing or the Balance Fund t-test has a positive and significant effect on Capital Expenditure in Aceh Province, an increase in the balance fund will increase Capital Expenditure in Aceh Province. Simultaneous testing or F-test Local Revenue, Balance Fund has a positive and significant effect on Capital Expenditure in Aceh Province.

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