

Conference Paper

Determinants of Capital Expenditure with Economic Growth As Moderating Variables on the Government District/City on the Island of Sumatra

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Abstract

This research aims to analyze the influence of financial self-sufficiency ratio, the ratio of the effectiveness of the PAD, the ratio, the ratio of the efficiency activity, fund balances toward capital expenditure on district/city governments in Sumatra, and also test whether economic growth is a moderator variable. The object of this research are all the countries and cities on the island of Sumatra. The data used are secondary data obtained from the Directorate General of Financial Equalization and the Central Bureau of statistics for the period 2012–2016. Statistical data analysis test used in this research is multiple linear regression using STATCAL. STATCAL is a statistical application program that can be used to perform graphical and statistical analysis. Simultaneous research results showed the ratio of financial independence, the ratio of the effectiveness of the PAD, the ratio, the ratio of efficiency activity, fund balances, and influential SiLPA significantly to capital expenditures. Partially, the financial independence of the area ratio, the ratio of the effectiveness of the PAD, the ratio of activity, and SiLPA affect significantly the capital expenditures; the ratio of funds and efficient use of perimbangan does not affect positively and is insignificant toward capital expenditures. Variable moderation is able to moderate the regional and financial self-sufficiency ratio of the effectiveness of the PAD, but can't moderate the efficiency ratio, the ratio of the activity, fund balances, and SiLPA toward capital expenditures.

Keywords: capital expenditures, financial self-sufficiency ratio, the ratio of effectiveness efficiency ratios, PAD, the ratio of the Fund's activity, perimbangan, SiLPA

1. Introduction

Law (Act) no. 32/2004 on Regional Government, giving local governments the opportunity to determine their own regional budgets (APBD) in accordance with the needs and potentials of the regions. The hope of providing regional autonomy, local governments increasingly independent, reducing dependence on the central government, both in terms of financing the development and management of local finances.

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Currently, it is still the main issue of how to create a transfer system so that the source of funds for the regions (especially the poor and low fiscal capacity) is relatively adequate and between regions with other regions are not unbalanced. In addition to the main issues that are not less important is how to direct the region, especially areas that are not rich in order to use the budget as closely as possible and contribute to improving the welfare of the community (Grand Design Fiscal Decentralization, 2009).

Capital expenditure has the consequence of obtaining fixed asset when the expenditure is fully realized or its output has been obtained. This means that the addition of fixed assets owned by local governments.

Capital expenditure budget is actually intended to meet the public needs in the procurement of public facilities and infrastructure provided free of charge by the local government. However, with the political interests of the legislature involved in the budgeting process, the allocation of capital expenditures is distorted and often ineffective in solving problems in society (Keefer & Khemani, 2003).

The decision to increase capital spending is part of a desire to improve the quality and quantity of public services, followed by an increase in other expenditures, namely operations and capital expenditures.

Large capital expenditures will have an impact on the coming period of increasing community productivity and increasing investors will increase local revenue. Conversely, if the small capital expenditure would hurt the public, because public infrastructure development is not optimal because Capital Expenditure is limited.

Research on capital expenditure is interesting to do because capital expenditure is prioritized in national development in 2017. Factors that may affect capital expenditure also become interesting to be discussed considering that capital expenditure is infrastructure development expenditure that triggers the direct increase of population economy. In addition to the above phenomenon there are also differences in previous research results related to independent variables of capital expenditure.

2. Literature Review

1. Capital Expenditure is a budget expenditure for a fixed asset that benefits more than one accounting period for use in government activities.
2. The ratio of local financial independence indicates the ability of regions to finance their own government activities, development, and services to the people who have paid taxes and levies as the income required by the regions.

3. PAD effectiveness ratio shows the ability of local government in realizing the planned PAD compared with the target set based on the real potential of the region.
4. The ratio of local financial efficiency is a ratio that describes the realization of expenditure and realization of regional revenue.
5. Activity Ratio This ratio illustrates how local governments prioritize the allocation of funds on routine expenditure and development spending optimally.
6. Balancing funds are funds sourced from APBN revenues allocated to regions to fund regional needs in the context of implementing decentralization in the form of DBH, DAU, and DAK.
7. SiLPA is the difference between the realization of revenues and expenditures, as well as the receipt and expenditure of financing in the APBD during a budget period.
8. Economic growth is the process of increasing the proportion of output proxied by Gross Regional Domestic Product (GRDP).

Hypothesis in this research is:

1. Financial independence ratios, PAD effectiveness ratios, efficiency ratios, activity ratios, balancing funds, and SiLPA have an effect on capital expenditures at district and municipal governments on the island of Sumatra simultaneously and partially.
2. Economic growth is able to moderate the relationship between financial independence ratio, PAD effectiveness ratio, efficiency ratio, activity ratio, balancing fund, and SiLPA with Capital Expenditure at Regency/City Government in Sumatera Island.

3. Methods

This research can be regarded as causal research. The object of research was conducted at the district/city government on the island of Sumatra. Data collection method used is documentation method, with data used is secondary data through website of Directorate General of Regional Financial Balance (DJPK) Republic Indonesia, National Statistics Bureau of Republic of Indonesia, and Central Bureau of Statistics.

The population in this research is all regency and municipal government in Sumatera Island consisting of 154 regencies/cities with observation period is 5 years (2012–2016) so that the amount of research data is 154 districts x 5 years = 770 research data.

3.1. Dependent variable

Capital expenditure indicator used for this variable is the Actual Capital Expenditure for 2012–2016 and uses the ratio measurement scale.

3.2. Independent variable

Ratio of regional financial independence using scale measurement ratio. Regional financial independence is measured by formula PAD divided by total income multiplied by 100%.

PAD effectiveness ratio using scale measurement ratio. The effectiveness of PAD can be measured by realization of PAD divided by target PAD multiplied by 100%.

The ratio of financial efficiency of the region using the scale of measurement ratio. The efficiency ratio is measured by the realization of expenditure divided by the revenue realization multiplied by 100%.

Ratio Activity ratio using the ratio measurement scale. The efficiency ratio is measured by capital expenditure divided by total APBD multiplied by 100%.

The balancing fund of indicators used is the accumulated realization of DBH, DAU, and DAK ($\Delta DP = \Delta DBH + \Delta DAU + \Delta DAK$) in APBD 2012–2016 fiscal year, with ratio measurement scale.

The SiLPA indicator used in this variable is the 2011–2015 SiLPA Realization and uses the ratio measurement scale.

3.3. Moderating variables

Economic growth is measured at constant prices to assess economic growth, expressed in rupiah (Rp) using a ratio scale.

Data analysis method used in this research model of simple regression analysis. The use of regression analysis method in hypothesis testing, first tested whether the model meets the classical assumption or not. Classical assumption test consists of normality test, heteroscedasticity test, multicollinearity test and autocorrelation test. Chow Test and Hausman Test.

4. Results

Descriptive statistical analysis is used to determine the description of a data viewed from the maximum value, minimum value, mean value, and standard deviation value.

TABLE 1: Descriptive statistical.

Variable	Min.	Max.	Mean	Std. Dev.
Capital Expenditure	20434.10	2154124	139005.8	233699.5
Ratio of financial independence	0.01	0.446438	0.030848	0.049719
Ratio of PAD effectiveness	2.24	361.9096	9.851422	18.71215
Ratio of efficiency	0.90	1.520856	0.057216	0.130072
Activity ratio	0.06	0.526569	0.070807	0.093129
Balancing funds	279852.83	3289966	290862.3	417255
SILPA	189.42	1604574	63645.11	130070.5
Economic growth	570.00	132063	10091.66	16209.75

Note: www.djpk.depkeu.go.id and www.bps.go.id

Classic assumption test results show normality, multicollinearity, heterocedastity and autocorrelation are met. The test results of Chow Test and Hausman Test model estimation used is FEM

4.1. Hypothesis testing

In testing the hypothesis, will be analyzed coefficient of determination, simultaneous influence test (*F*-test), and partial effect test (*t*-test). The statistical values of the coefficient of determination, *F*-test, and *t*-test.

Simultaneously there is influence because the value of Prob. (*F*-statistics), that is 0.001037 < 0.05.

From the same result, we can investigate the influence of each indicator on partial corporate value. The results using *t*-test are presented in Table 2.

Ratio of financial independence, Ratio of PAD effectiveness, Activity ratio, SILPA affects partial capital expenditure due to prob. below 0.05. The ratio of efficiency and balancing funds does not affect capital expenditures because of the prob. below 0.05.

TABLE 2: *t*-statistic and probabilities.

Variable	t-Statistic	Prob.
Ratio of financial independence	3.6519	0.0003
Ratio of PAD effectiveness	-2.4700	0.0138
Ratio of efficiency	0.9750	0.3300
Activity ratio	4.6337	0.0000
Balancing funds	1.6789	0.0937
SILPA	3.5879	0.0004
Economic Growth _X1	2.66347	0.0079
Economic Growth _X2	2.49993	0.0127
Economic Growth _X3	-1.49029	0.1366
Economic Growth _X4	-1.54506	0.1228
Economic Growth _X5	0.244902	0.8066
Economic Growth _X6	-0.43541	0.6634

5. Discussion

The test results influence the financial independence ratio is positive value means that each addition of financial independence ratio of 1% will increase capital expenditure next year amounted to 3.840258% assuming other variables constant.

The positive influence indicates that the ratio of financial independence is in line with capital expenditure, where increasing the ratio of financial independence will increase capital expenditure. The ratio of financial independence has a significant positive effect on capital expenditure, this is due to the local government of regencies/cities on the island of Sumatra, capital expenditure becomes a priority so that the increase in financial self-finance ratio of the region thus increasing the capital expenditure next year.

The result of testing the influence of the effectiveness ratio of PAD to the allocation of capital expenditure of 1% will decrease the capital expenditure next year equal to -1.841504% assuming other variable is constant. The value can be interpreted variable of PAD effectiveness ratio have negative effect to variable of capital expenditure. Given the value of Prob. of the variable of PAD effectiveness ratio is 0.0138, that is, < 0.05, then the variable of PAD effectiveness ratio significantly (statistically) to capital expenditure variable.

A high effectiveness ratio, reflecting the already well-established regional capability in realizing the planned PAD compared to the target set based on the real potential of the region. PAD effectiveness ratios have a negative effect on capital expenditure, PAD is allocated not for capital expenditure alone, to increase personnel expenditure, etc.

The regional financial efficiency ratio has no effect on capital expenditure possibly because the use of regional finance by district/municipality governments on the island of Sumatra is less efficient. Another thing that is suspected to be the cause of the regional financial efficiency ratio has a negative effect on capital expenditure is the possibility of district/city governments on the island of Sumatra not all apply the Cost Analysis Standards in preparing the activity budget/program, so it is likely that many activities/programs are inefficient (unnatural) in budgeting costs.

The test results of the influence of local financial performance variable positive value means that each addition of activity ratio of 1% will increase capital expenditure next year amounted to 1.812573% assuming other variables constant. This value can be interpreted by activity ratio variable have positive effect to variable of capital expenditure.

According to Halim (2012) the higher the percentage of funds allocated for routine expenditure means that the percentage of development spending used to provide public economic infrastructure tends to be smaller. Performance of Local Government Revenue and Expenditure Budget in Sumatera Island is seen from the ratio of activity/harmony in line with the theory according to Halim. Where the percentage of funds allocated for routine expenditure is greater than the percentage of development spending used to provide community economic infrastructure.

The result of testing the influence of local financial performance variable with positive value means that each addition of fund balance equal to 1% will increase capital expenditure next year equal to 1.156736% with assumption other variable constant. The value can be interpreted variable balancing fund positively affect the variable of capital expenditure.

The regional financial efficiency ratio has no effect on capital expenditure possibly because the use of regional finance by district/municipality governments on the island of Sumatra is less efficient. The high ratio of regional financial efficiency is likely caused by high realization of expenditure but not balanced with the realization of regional revenue, resulting in wastage of regional expenditure but not used for maximum capital expenditure. During this time, regional expenditures are dominated by personnel expenditure and other operational expenditures while the share of capital expenditure is relatively small. Another thing that is suspected to be the cause of the regional financial efficiency ratio has a negative effect on capital expenditure is the possibility of district/city governments on the island of Sumatra not all apply the Cost Analysis Standards in preparing the activity budget/program, so it is likely that many activities/programs are inefficient (unnatural) in budgeting costs.

The result of SiLPA influence on capital expenditure with positive value means that every SiLPA addition of 1% will increase capital expenditure next year equal to 1.033118% assuming other variable is constant. The value can be interpreted SiLPA positively affect the variable of capital expenditure.

The results of this study indicate that SiLPA has a significant positive effect on next year's capital expenditure. This may indicate the possibility of District Government in Sumatera Island allocating SiLPA area to fund the implementation of activities aimed at public services accommodated in capital expenditure activities, this is in accordance with the objectives of SiLPA based on the explanation of Permendagri Number 13 of 2006.

6. Conclusion

Ratio of financial independence, ratio of PAD effectiveness, efficiency ratio, activity ratio, fund and SiLPA fund simultaneously have a significant effect on capital expenditure. Nevertheless partial test shows not all independent variables affect the variable of capital expenditure. Ratio of local financial independence, PAD effectiveness ratio, activity ratio and SiLPA have significant effect to capital expenditure; efficiency ratio and fund perimbangan no positive effect is not significant to capital expenditure.

Economic Growth Variables are able to moderate the relationship between the variables of regional financial independence ratio, the effectiveness ratio of PAD but only weaken the relationship to capital expenditure. While efficiency ratio, activity ratio, balance fund and SiLPA, economic growth cannot moderate with capital expenditure.

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