

# The Role of Moderating Economic Growth Variables on the Effect of Allocation Funds and Capital Expenditures in Local Government

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## Abstract.

*This study aims to analyze the effect of the General Allocation Fund (DAU) and Special Allocation Fund (DAK) variables on capital expenditures. In addition, this study uses the role of intervening variables to analyze the effect of these variables. The data source for this research uses secondary data sources originating from the Director General of Fiscal Balance of the Regional Government. Respondents in this study were local governments in Central Java with a total of 35 regencies and cities for the period 2016-2019. The results of the analysis show that the DAU variable has a positive and significant effect on capital expenditure while the DAK variable has no significant effect on the modal expenditure variable. In addition, the results of the analysis also show that the variable Economic Growth (PE) is not a variable that mediates the effect of DAU on capital expenditure, while further analysis shows that PE is a variable that mediates the effect of DAK on capital expenditure.*

**Keywords:** Capital Expenditure, DAK, DAU, PAD, Local Government.

## 1. INTRODUCTION

Capital expenditures according to Government Regulation [1] are budget expenditures for the acquisition of fixed assets and other assets that provide more than one benefit, meaning that capital expenditures whose benefits exceed one budget year will increase regional wealth or assets and will increase routine expenditures such as expenses. maintenance in the general administration expenditure group. Therefore, local governments must be able to allocate capital expenditure budgets properly because it is one of the factors for local governments to provide public services.

The condition of each region illustrates that it can affect different financial capabilities in funding their activities, this causes differences in fiscal conditions between one region and another. To overcome these problems, the central government allocates funds sourced from the APBN to fund regional needs for the implementation of decentralization. The General Allocation Fund (DAU) is one of the funds used to allocate the aspect of equity. With the transfer from the center to the regional government, it is hoped that the regional original revenue (PAD) obtained by the regional government will be used to finance its capital expenditures. The form of transfer of funds from the central government in addition to the DAU, is also in the form of a special allocation fund (DAK). DAK is an allocation fund sourced from APBN (State Expenditure Budget) revenues that are allocated to certain regions with the aim of helping to fund special activities which are regional affairs and in accordance with national priorities [2].

PAD is the income owned by the local government which is sourced and collected by the local government. Sources of PAD consist of: local taxes, regional retributions, profits from regionally-owned enterprises (BUMD), and other legitimate local revenue. PAD is also all regional revenues originating from regional original economic sources. This income comes from four types of income, such as local taxes, regional levies, separated wealth management, and other income [3].

Previous studies that have examined PAD and its influencing factors have been widely carried out, the results of the study show that local revenue and special allocation funds have a negative effect on capital expenditure [4], other research results also state that general allocation funds have a negative effect on

capital expenditure [5], general allocation funds have a positive influence on capital expenditure [6], the level of economic growth has been proven to strengthen the influence of PAD on capital expenditures [7].

Increased economic growth in an area has an impact on increasing investor interest in investing, including in Central Java so that PAD sources from local taxes will increase or develop. The results of the study [8] stated that there is a positive relationship between economic growth and capital expenditures. If economic growth increases and is accompanied by higher regional income, this condition can increase the capital expenditure of a region, while other research states that economic growth has a role in weakening the influence of DAK on capital expenditure, meaning that the higher the economic growth, the effect of DAK on capital expenditure is decreasing [9]. Furthermore, economic growth moderates the effect of DAU on capital expenditures, meaning that local governments can use DAU to provide services to the public which are realized through capital expenditures [9].

## II. METHODS

The type of data used in this study uses quantitative data types, while the data sources of this study use secondary data, namely audited local government financial reports and the annual financial statements of the Ministry of Finance of the Republic of Indonesia which are registered on the website of the Director General of Fiscal Balance of Regional Governments by taking data from the APBD realization report. during the 2016-2019 period. The research data was downloaded from the official website of the Director General of Fiscal Balance of the Regional Government [www.djpk.depkeu.go.id](http://www.djpk.depkeu.go.id).

The population of this study is data on local revenue, General Allocation Funds and Special Allocation Funds for district and city governments in Central Java Province, a total of 35 districts and cities registered with the Director General of Fiscal Balance of Local Government. The sampling technique used is the census method. The data analysis technique used panel data regression analysis method. The analytical methods used include descriptive statistical analysis, panel data regression model selection, assumption test Classical assumption test (normality, multicollinearity, autocorrelation, and heteroscedasticity), model accuracy (F test), partial test (t test) and regression analysis of intervening variables. by using the Eviews 11 application.

## III. RESULT AND DISCUSSION

This study uses data as much as 140 observational data originating from the 4-year research period (2016-2019) with a total sample of 30 districts and 5 cities. The model used in this study is panel data regression. Determine the most appropriate Fixed Effect or Common Effect model used in estimating panel data, a Chow test is carried out. The following are the results of the Chow test in table 1:

**Table 1. Chow Test**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.306093	(34,102)	0.0000
Cross-section Chi-square	124.613500	34	0.0000

The results of the Chow test concluded that the probability value for cross-section F of 0.0000 is smaller than the significance value of  $= 0.05$ , meaning that the correct model is a fixed effect, the results will be compared to the random effect test using the Hausman test. The results of the Hausman test in table 2 show the prob value. for a random cross-section of 0.0000 is smaller than the significance value of  $= 0.05$  so that the correct model is fixed effect.

**Table 2. Hausmant Test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.0000	3	0.0275

The next test is to compare the Common Effect and Random Effect models. Based on the results in table 3, it can be concluded that the p value. for Breusch-Pagan, 0.0000 is smaller than the significance value of = 0.05 so that the appropriate model in this study is random effect.

**Table 3. Lagrange Test**

Test Hypothesis		
Cross-section	Time	Both
Breusch-Pagan 35.63265 (0.0000)	0.097375  (0.7550)	35.73003  (0.0000)

The next stage of testing is the classical assumption test. This test aims to test the feasibility of the regression model used. The classic multicollinearity assumption test is presented in table 4. The test results show the correlation value of each independent variable < 0.90, meaning that there is no multicollinearity problem.

**Table 4. Multicollinearity Test**

	PE	DAU	DAK
PE	1.000000	-0.053028	-0.281277
DAU	-0.053028	1.000000	0.603307
DAK	-0.281277	0.603307	1.000000

The classic assumption test of autocorrelation is presented in table 5. The test results show that based on the fixed effect model, it can be seen that the Durbin-Watson value is 2.067827. This value lies between 1.55 and 2.46, so it can be concluded that there is no autocorrelation. The table shows the results of the classical assumption of heteroscedasticity. The results of the analysis show that the probability value of each variable is greater than the significance value of = 0.05, meaning that there is no heteroscedasticity. The normality test in this study was not carried out because the data used was > 30, so the sample distribution was considered normal.

**Table 5. Autocorrelation Test**

Cross-section fixed (dummy variables)			
R-squared	0.868267	Mean dependent var	3.81E+11
Adjusted R-squared	0.818704	S.D. dependent var	1.82E+11
S.E. of regression	7.76E+10	Akaike info criterion	53.21844
Sum squared resid	6.08E+23	Schwarz criterion	54.03789
Log likelihood	-3686.290	Hannan-Quinn criter.	53.55144
F-statistic	17.51851	Durbin-Watson stat	2.067827
Prob(F-statistic)	0.000000		

**Table 6. Heteroskedasticity Test**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.154110	1.369587	5.223552	0.0000
PE	0.000510	0.001325	0.384964	0.7009
DAU	5.67E-13	1.28E-12	0.441914	0.6593
DAK	-1.06E-12	2.39E-12	-0.441590	0.6595

**Table 7. t - Test**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.36E+11	3.05E+11	-1.758552	0.0817
PE	-1.806802	54137826	-0.333741	0.7393
DAU	0.810480	0.344716	2.351156	0.0207
DAK	0.029055	0.131337	0.221224	0.8254

The results of the analysis in table 7 show that the DAU variable has a positive and significant effect on capital expenditures ( $0.0202 < 0.05$ ), meaning that if general allocation funds increase then capital expenditures will increase, and vice versa if general allocation funds decrease then capital expenditures will also decrease, while The DAK variable has no significant effect on the capital expenditure variable ( $0.8254 > 0.05$ ), meaning that the special allocation fund increases, the capital expenditure will increase, if the special allocation fund decreases, the capital expenditure will also decrease, while the PE variable has no significant effect on the expenditure variable. capital ( $0.7393 > 0.05$ ).

**Table 8. t - Test**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1016.798	548.1787	1.854866	0.0665
DAU	2.58E-11	6.30E-10	0.040847	0.9675
DAK	-6.40E-10	2.32E-10	-2.761122	0.0068

Based on the analysis in table 8, the DAU variable has no significant effect on the economic growth variable (PE) ( $0.9675 > 0.05$ ), while the DAK variable has a negative effect on the PE variable ( $0.0068 < 0.05$ ), meaning that if DAK increases, economic growth will increase. decreased, whereas if the special allocation fund decreased then economic growth would also increase.

The results of the analysis in table 7 and table 8 show the direct effect of DAU on capital expenditure of 0.810. While the indirect effect through economic growth is equal to  $DAU \times PE = 2,580 \times -1,860 = -4.7988$ , meaning that the value of indirect influence through PE is smaller than the value of direct influence. With these results it can be concluded that economic growth is not a variable that mediates the effect of DAU on capital expenditures. The results of the analysis also show that the direct effect of DAK on capital expenditure is 0.040, while the indirect effect through PE is  $-6,400 \times -1,860 = 11,904$ . Therefore, it can be concluded that the value of the indirect influence through PE is greater than the value of the direct influence of DAU on capital expenditure, so economic growth becomes a variable mediating the effect of special allocation funds on capital expenditure.

#### IV. CONCLUSION

Capital expenditures are used as budget expenditures for the acquisition of fixed assets and other assets that benefit more than one accounting period. which are routine in nature such as maintenance costs in the general administration expenditure group. The amount of capital expenditure in local governments is influenced by several factors, including general allocation funds and special allocation funds. In addition, the economic growth factor is an indirect impact on capital expenditures issued by local governments.

The results of the analysis conclude that only the general allocation fund factor has an impact on the cost of capital issued by local governments, while the role of economic growth only has an indirect impact on the effect of special allocation funds on capital expenditures.

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