

## How to Optimize the Quality of Capital Expenditure?

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**ABSTRACT:** This study aims to examine the impact of local own-source revenue, transfer to local and village funds, and other revenue towards capital expenditure. This study used quantitative method. By applying multiple regression to evaluate the proposed model with a sample of 33 provincial government in Indonesia, this study confirms the impact of local own-source revenue and other revenue on capital expenditure, but not transfer to local and village funds. This study provides an opportunity for provincial government to increase their local revenue through the development of local own-source revenue and other revenue. To improve local revenue, this study suggests that provincial government must provide prompt and accurate service. It is also important for provincial government to keep the operational government compliant with the good governance.

**KEYWORDS** -local own-source revenue, transfer to local and village funds, other revenue, capital expenditure

### I. INTRODUCTION

Regional autonomy implemented in Indonesia has created a transfer of power and authority of local government, which was initially centralized to decentralization(1). To carry out the functions and authorities of local government in the form of implementing regional autonomy, every local government must be able to recognize its potential and identify its resources(2). Capital expenditure is one way to realize the goals of regional autonomy, namely improving welfare and services to the people, this concludes that capital expenditure is significant because it helps realize people welfare(3). Capital expenditures used by local government must provide effectiveness in implementing local government activities. The effectiveness of capital expenditure in the state budget offers expectations of the people from their government is that available resources be used efficiently and effectively to provide the highest level of public services possible(4). Capital expenditure is one of those affected by Coronavirus Disease 2019 (Covid-19). Although aggregate measures of state-local capital expenditure were relatively stable over this decade in the United States of America, real per capita public capital expenditure increased around the mild recession of 2001 and the great recession of 2007 through 2009(5).

Several previous studies have been conducted regarding capital expenditure. One of them is(6) who found that the relationship between local own-source revenue and capital expenditure is local own-source revenue is one of the sources used to finance local expenditure, one of which is capital expenditure. The high local own-source revenue does not necessarily have a high capital expenditure. One of the reasons is that most of the income received by the local government is used for other financing purposes such as operational activities and personnel expenditures(7). Another study was conducted by(8) who found that with an increase in local own-source revenue, local government can improve public services through capital expenditure.

The existence of transfers to local and village funds from the state government, one of which is general allocation funds, is needed by the local government for the benefit of providing better services to the people, especially in improving public facilities and infrastructure facilities to support regional development(7). Research conducted by(9) found that transfers to local and village funds have a significant effect on local expenditure which is the aid, or it can be said that funds originating from state government grants are aimed at overcoming the fiscal gap in funding regional needs in the implementation of local government affairs. Research

conducted by(10) also found that the state government provides transfers to local and village funds to create justice in the distribution of resources both for the national interest and the interests of the people.

Driven by this gap, the current study tries to examine local revenue towards capital expenditure and their determinants including local own-source revenue, transfer to local and village funds, and other revenue. This research contributes in several ways. First, most of the previous research on capital expenditures was carried out before Covid-19. This study examines how to optimize capital expenditure in the period before and after Covid-19 so that it is very necessary for efforts to accelerate capital expenditure in the future. Second, the research contributes to the public sector accounting literature by providing empirical evidence on the determinants of capital expenditure. Conducting such a study is important not only to confirm and extend theoretical understanding of the concepts but also to provide important information to local government and state governments to increase capital expenditure.

## **II. RESEARCH METHOD**

This research was conducted by emphasizing testing on the theory of quantitative measurement of variables and analysing data through statistical procedures, which is commonly known as explanatory research. The data used in this study is pooled data, a combination of cross-section and time-series data(11,12). The data source uses secondary data obtained from the Indonesian Ministry of Finance of the Republic of Indonesia and Statistics Indonesia. The sampling technique used purposive sampling, namely the sampling here is confined to conform to some criteria set by the researcher. a technique in determining evidence through specific benchmarks according to research targets(13). The considerations taken to determine the sample are the provincial government for the 2010-2021 period, meeting the criteria for presenting provincial financial statements, and the provincial government must have data for the variables needed in the study. Based on the criteria and selection, the researcher obtained 33 provincial governments.

The independent variables in this study are local own-source revenue, transfer to local and village funds, and other revenue. The first independent variable to be studied is local own-source revenue. A study conducted by(14) found that the implementation of decentralization has an impact on the economy where local own-source revenue is one of the primary sources of local government to obtain sources of funds. Local own-source revenue is used to finance various expenditure activities and government can raise revenues either through tax or non-tax mechanisms(15). The next independent variable is transferred to local and village funds.(16) explained that transfer to local and village funds is one element of the transfer of revenue from the state government to the local government. The transfer of revenue from the state government that is taken is only a general allocation fund due to an unconditional grant. The difference between the results of fiscal capacity and fiscal need is used as a calculation to obtain the fiscal gap. Fiscal capacity can be measured based on local own-source revenue obtained and revenue-sharing funds(17). Based on the concept of the fiscal gap, the distribution of general allocation funds to regions with relatively large capacity will be smaller, and conversely, regions with relatively small financial capacity will receive relatively large general allocation funds. With this concept, in regions whose fiscal capacity is greater than the fiscal needs, the calculation of the general allocation fund will be negative(18).

Finally, another revenue is the third independent variable of this research. Another revenue is regional revenue originating from others belonging to the local government which is provided to account for local revenue in addition to local own-source revenue and transfers to local and village funds(3,19). Another revenue is used to increase economic growth and one of them is economic growth starting from capital expenditure carried out by the local government(20). This study uses capital expenditure as a dependent variable. Government capital expenditure is the money spent on goods that are classified as investment goods(21).(22) defines local expenditure as the total expenditure of local government to carry out management functions and public services. Capital expenditure will affect the regional balance sheet by increasing the value of regional assets(23).

The data collection technique used is documentation. Data in the form of provincial financial statements is obtained from Ministry of Finance of the Republic of Indonesia and Statistics Indonesia. Data

analysis used descriptive statistics and multiple regression. Descriptive statistics describe the data in terms of mean, maximum, minimum, and standard deviation. Furthermore, the classical assumption test was carried out in this study. Finally, multiple regression is a study of the dependence of the dependent variable with more than one independent variable.

### III. RESULTS AND DISCUSSION

Based on the purposive sampling method, a sample of local government that is included in the provincial government in a row for the period 2010-2021 is obtained from as many as 33 provincial governments with 396 observation data. The results of the descriptive analysis are described in Table 1.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
Local own-source revenue	396	77842742792	57561160000000	3867497669110.41	7088368492238.14
Transfer to local and village funds	396	32807368096	22673790000000	3179420779838.07	3394210882609.42
Other revenue	396	614512500	8774800085740	865186177856.23	1770554323042.61
Capital expenditure	396	108996106112	18041250000000	1242364955519.27	1880385464371.25
Valid N (listwise)	396				

Table 1 shows the results that the minimum local own-source revenue is 77842742792 and the maximum is 57561160000000 with a mean value of 3867497669110.41 and the standard deviation or distribution of data values or differences in sample values with a mean of 7088368492238.14; transfer to local and village funds indicates minimum 32807368096 and maximum 22673790000000 with mean 3179420779838.07 and standard deviation 3394210882609.42; other revenue point minimum 614512500 and maximum 8774800085740 with mean 865186177856.23 and standard deviation 1770554323042.61; capital expenditure exhibits minimum 108996106112 and maximum 18041250000000 with mean 1242364955519.27 and standard deviation 1880385464371.25.

The second step is carried out with classical assumptions and is fulfilled for the multiple regression process. Furthermore, testing the coefficient of determination. The researcher used the adjusted  $R^2$  value to evaluate the best regression model. These results are shown in Table 2. The results of the coefficient of determination on capital expenditure show an R-value of .857. The adjusted  $R^2$  figure of .732 means that the variable capital expenditure can be explained by the variable local own-source revenue, transfer to local and village funds, and other revenue of 73.2%. On the other hand, the remaining 26.8% is explained by other variables not studied. This shows that there is a strong relationship between the variables of local own-source revenue, transfer to local and village funds, and other revenue on capital expenditure.

Table 2. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.857	.734	.732	973781081030.96

Predictors: (Constant),  $X_1$ ,  $X_2$ ,  $X_3$   
 Dependent Variable: Y (Capital Expenditure)

The next step is to perform statistical tests simultaneously. Table 3 shows the magnitude of the  $F_{count}$  value of 360,294 and has a positive relationship direction. The statistical value shows a significant result  $\alpha = .05$ , which is .000. This value is smaller than the minimum significant requirement, which is .05. Other results obtained from the simultaneous test are df for regression 3 and df for residual 392 so that the overall  $F_{table}$  value

is 2.64. This result is smaller than  $F_{count}$  of 360,294. This points that the local own-source revenue, transfer to local and village funds, and other revenue variables simultaneously have a simultaneous effect. Therefore, the variable test was rejected.

Table 3. Simultaneous Test

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	1024946709615044500000000000	3	341648903205014840000000000	360,294	.000
Residual	371713840759342000000000000	392	948249593773831600000000		
Total	139666055037438650000000000	395			
Predictors: (Constant), X <sub>1</sub> , X <sub>2</sub> , X <sub>3</sub>					
Dependent Variable: Y (Capital expenditure)					

The last in multiple regression is the partial test. The results of the regression analysis presented in table 4 of local own-source revenue indicate that sig .000 and this result is sig smaller than .05. The result of  $t_{count}$  16,684 which is greater than  $t_{table}$  is known to come from 1.972 so local own-source revenue has a positive and significant effect on capital expenditure. This result confirms scholars(6,8) that local own-source revenue is an important component of local revenue because most of the local revenue comes from local own-source revenue. Therefore, the increase in local own-source revenue determines capital expenditure for activities that encourage development in the region. This finding is contrary to past studies(7) that local own-source revenue is insignificant to capital expenditure. Local own-source revenue can create regional development by accelerating capital expenditure so that local governments can explore and manage regional potential as a source of financing to create regional infrastructure.

For the variable transfer to local and village funds, sig .975 is greater than .05 so transfer to local and village funds does not have a significant effect on capital expenditure. Besides being intended to assist regions in capital expenditure to fund their authority, transfers to local and village funds aim to reduce the gap in government funding sources between the state government and local government and reduce the gap in government funding between regions. However, these findings are contrary to(1,10)which confirmed that transfer to local and village funds had a positive and significant effect on capital expenditure.

Finally, the results of the other revenue regression analysis show that sig .000 and this result is sig smaller than .05. The result of  $t_{count}$  7,297, which is greater than  $t_{table}$ , is known to come from 1.972 so other revenue has a positive and significant effect on capital expenditure. This finding supports past studies' findings(19,20) that the increase in other revenue is expected to be able to make a positive contribution to regional infrastructure development. Capital expenditure must be adjusted to the needs of the region by considering the income received so that if the local government wants to increase capital expenditure for public services and public welfare, then the local government must explore regional revenues as much as possible.

Table 4. Partial Test

Model	Coefficient regression	t	sig
Local own-source revenue	.814	16,684	.000
Transfer to local and village funds	.002	.031	.975
Other revenue	.192	7,297	.000
Dependent Variable: Capital expenditure			

#### IV. CONCLUSION

This study bears fruitful practical aspects for the government in developing local revenue with the local own-source revenue, transfer to local and village funds, and other revenue towards capital expenditure. First, this study highlights the importance of local revenue with local own-source revenue as an important determinant of revenue towards capital expenditure. This finding suggests that local government realizes that local own-source revenue plays an important role in expenditure. Second, this study demonstrates the importance of other

revenue on local revenue formation of capital expenditure. The finding of this study implies that; besides a local own-source revenue, other revenue is an important platform for managing the capital expenditure of the provincial government.

Although contributing significantly to extending our understanding of the determinants of local revenue toward capital expenditure, this study bears some defects. First, this study focuses on the local government of provincial government in Indonesia. Therefore, the sample of this study is not entirely typical of the government's target population. Subsequently, the findings of this study cannot be generalized to all local governments in Indonesia. To obtain a better and more representative result of the model, future study could test the relationship between the variables in regency/city government and provincial government in Indonesia. Second, the focus of this study is attributed to the role of local own-source revenue, transfer to local and village funds, and other revenue as the drivers of local revenue towards capital expenditure. They are many other variables influencing capital expenditure, such as growth, government performance, and human development index. Finally, the extended local revenue model could be tested in other capital expenditures with moderation and intervening.

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