

## **Local Government Own-source Revenue and General Allocation Funds on Capital Expenditure: Economic Growth as Moderating Variable**

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### **Abstract**

This article aims to analyze the influence of locally-generated revenue in local government in Indonesia and general allocation funds on capital expenditure with economic growth as moderating variable. This examination involves auxiliary information such as the 2015-2019 local budget report. The number of tests in this review was 29 areas from 34 territories in Indonesia. This review utilizes the Partial Least Square (PLS) examination with the assistance of WarPLS 7.0 programming. The results showed that neighborhood income positively affects capital use. General allocation funds positively affect capital expenditure. Moreover, financial development directs or strengthens local government own-source income through capital expenditure.

### **Keywords**

*Locally-generated revenue, General allocation funds, Capital expenditure, Economic growth*

## 1. Introduction

Indonesian local governments have many problems regarding budget allocation, usually facing a limited budget to allocate expenditure in the provision of public services. In fact, in the summary of the audit results, there are various deviations in the budgeting of capital expenditures that do not follow the established laws and regulations, verification is not carried out so that there is a price difference, and the realization of capital expenditures for the procurement of machine tools does not comply with the provisions of procurement and budgeting provisions, as well as excess goods for the purchase of goods, including the purchase of fuel and building maintenance (Furqan & Din, 2018).

Local own-source revenue aims to fund the implementation of regional autonomy in accordance with the potential for decentralization while the regional government has this authority. The allocation of local government capital expenditures should adjust the region's needs to the original regional income received (Kuncoro, 2007). Local revenue is used in capital expenditure, so the government should increase local revenue so that capital expenditure also increases (Masdar et al., 2021). It will be more likely to impact better public services and community welfare. Problems faced by the government in 2015-2019 in the summary of the audit results were that local own-source revenue was overpaid due to the volume of work, management, and accountability that were not fully adequate, and there was still non-compliance with laws and regulations. In addition, the use of assets and services not deposited with the government state treasury and recordings that have not been made or are inaccurate include the acquisition value of fixed assets (Budiman et al., 2020; Satya et al., 2022).

Economic growth is a parameter of development activity. It means that economic growth can measure the level of activity development in economic sectors in an economy. Previous research by Mawarni & Abdullah (2013) and Jaya & Dwirandra (2014) found empirical evidence that economic growth positively affects capital expenditure. In contrast to the research conducted by Syukri & Hinaya (2019), they found empirical evidence that economic growth did not affect capital expenditures.

Economic growth in this study is used as a moderating variable. The rate of economic growth can strengthen the influence of local own-source revenue and General Allocation Funds on capital expenditures. The higher the level of economic growth should increase the local own-source revenue for capital expenditures (Pagano, 2002). The increasing economic growth has an impact on increasing the income per capita of the population so that the level of consumption and productivity of the population increases. In addition, the higher the income earned by the community, the higher the community's ability to pay the levies set by the local government. It is more likely to increase the source of the regional revenue, and, of course, the local own-source revenue will increase. Increasing the economic growth can also attract investors to invest in the region so that sources of local own-source revenue, especially those from regional taxes, will increase. The magnitude of economic growth in each region can strengthen the relationship between local own-source revenue and General Allocation Funds for capital expenditures. Thus, this

research was conducted to analyze the effect of local own-source revenue and general allocation funds on capital expenditures with economic growth as a moderating variable.

## **2. Literature Review and Hypothesis Development**

### ***2.1. Agency Theory***

An agency relationship is a contract between one or more persons (principals) involving other people (agents) in carrying out a delegation for decision-making (Jensen & Meckling, 2019). The principal acts in supervising and providing an assessment of the tasks performed by the agent. The local government budget follows the Government Work Plan (GWP), which will be used as a control by the principal to monitor and assess the performance of the local government. The relationship between agency theory in this study can be seen through the relationship between the central government and local governments in the distribution of balancing funds and the relationship between the community represented by the principal and local government as an agent. The central government delegates authority to local governments to independently regulate all government activities in their regions. Therefore, due to the delegation of authority, the central government lowers the balancing fund to assist local governments in funding daily government needs and providing better public services to the community.

In addition, agency theory is implicit in the relationship between local government and the community. The community, as the principal, has provided resources to the region by paying taxes, levies, and so on to increase local revenue. The local government, as an agent, in this case, should provide feedback to the community in the form of public services funded by the local revenue itself (Spender, 2011).

### ***2.2. Local Government Budget***

According to Siregar (2015), the regional government budget is the regional government's annual financial plan that the House approves of Representatives. The budget is a guideline for actions to be carried out by the government, including plans for revenues, expenditures, transfers, and financing. These are measured in rupiah and arranged according to certain classifications systematically for one period. Regional expenditures are all from the regional general treasury account that reduces the excess budget balance in the period of the relevant fiscal year, which the Regional Government will not repay. Regional Expenditures consist of Indirect Expenditures and Direct Expenditures; capital expenditures are closely related to investments made by the government (Pattawae, 2022; Din et al., 2022).

According to Siregar (2015), local own-source revenue is the revenue the Regional Government obtains from sources within its territory, which is collected based on Regional Regulations. Local own-source revenue includes regional taxes, regional levies, separated regional wealth management results, and other legitimate ROI. to Law No. 23 of 2015, and General Allocation Funds are funds sourced from the state budget that is allocated with the aim of equitable distribution of financial

capacity between regions to fund regional needs in the context of implementing decentralization, with such balance, in particular, the general allocation fund will provide certainty for regions in obtaining financing sources to finance the expenses for which they are responsible. According to Siregar (2015), General Allocation Funds are funds intended to distribute regional financial capabilities evenly. In Law No. 33 of 2004, it is explained that the total amount of the General Allocation Fund is set at least 26%, which is then distributed to the province at 10% and the district/city at 90% of the total General Allocation Fund.

### ***2.3. Fiscal autonomy and economic growth***

Regional autonomy in Indonesia was first regulated in Law No. 22 of 1999, after which it was revised into Law No. 9 of 2015 concerning the second amendment to Law No. 23 of 2014. Regional governments enforce regional autonomy to build and improve public services for the welfare of the community fulfilled equally and to accelerate economic and regional growth. Regional autonomy is designed to give authority to each region so that it is more likely to increase independence and not be fixated on central regulations. The regional budget regulated in the Ministry of Home Affairs Regulation No. 33 of 2019 is classified into two, namely direct expenditure and indirect expenditure. Direct expenditure includes personnel, goods and services, and capital. Meanwhile, indirect expenditure consists of interest, subsidy, grant, social assistance, profit sharing, financial aid, and unexpected expenditure. Capital expenditure is used for the procurement of fixed assets and other assets.

Economic growth is increasing output per capita long-term (Boediono (1999; Acemoglu, 2012). Gross Regional Domestic Product (GRDP) is the total value added of goods and services produced from all economic activities in an area. The economic growth is reflected in the Gross Domestic Product. Gross Regional Domestic Product is the gross added value of all goods and services produced in the local area arising from various economic activities within a certain period. The calculation of GRDP uses two kinds of prices: current and constant. GRDP at current prices is the added value of goods and services calculated using the prevailing prices in the relevant year, while GRDP constantly is calculated using prices in a certain year as the base year. Local own-source revenue is used in accordance with the needs of the government so that in allocating capital expenditures, it should be adjusted to regional needs by taking into account the received Local own-source revenue. High local revenue is more likely to increase the allocation of capital expenditures realized in infrastructure facilities and infrastructure. Previous research conducted by Mulyani (2016), Priambudi (2017), Lestari (2017), Susanti & Fahlevi (2016), Kis-Katos & Sjahrir (2017), and Lewis (2013; 2019) found empirical evidence that local own-source revenue has a positive effect on capital expenditure.

In contrast, Suryani & Pariani (2018) show that local own-source revenue has no effect on capital expenditures. Moreover, the General Allocation Fund is sourced from the state budget, which aims to carry out regional operational activities and regional needs in implementing decentralization. So with these funds, the local government can provide better services to the public. It creates fiscal imbalances

because local governments cannot carry out their responsibilities to fund these activities. To overcome fiscal inequality, the central government conducts fiscal decentralization so that it is expected to be able to finance government administration and development.

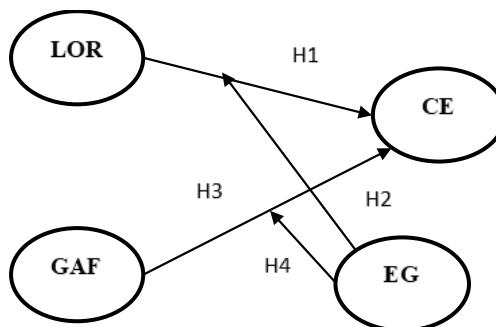
Kuntari (2019), Mulyani (2016), Nasution (2017), and Rini et al. (2018) showed that general allocation fund has a positive and significant effect on capital expenditure. While the research conducted by Suhendra (2015), the general allocation fund does not affect capital expenditure. This condition is caused because the General Allocation Fund used by the government is only slightly for capital expenditure and is widely used for other purposes, such as funding regional potentials to increase regional income. The economic growth rate is thought to strengthen local revenue's effect on capital expenditures. The increasing economic growth will be more likely to impact the population per capita so that the population's level of consumption and productivity increases. Based on the descriptions, the following hypotheses are proposed:

H1: Local own-source revenue positively affects capital expenditure

H2: Economic growth strengthens the relationship between local own-source revenue positive effect on capital expenditure.

H3: The general allocation fund has a positive effect on capital expenditure

H4: Economic growth strengthens the relationship between the general allocation fund and capital expenditures.



Source: Authors' data (2022)

Figure 1. Research Framework

### 3. Methods

This study used a national dataset for all provinces in Indonesia. The population in the study was 34 provinces in Indonesia from 2015-2019. Sampling used purposive sampling so that 29 provinces were sampled in this study. In this study, a structured observation technique was used, which is a method used to analyze and record systematically what will be observed, when, and where it is. The operational variable of all variables is shown in Table 1.

This research uses the Partial Least Square (PLS) analysis technique using WarpPLS version 7.0 software. PLS is an equation model of Structural Equation Modeling (SEM) based on components or variances (variance).

**Table 1.** Operational definition of variables

No.	Variable	Indicator	Scale
1.	Local own-source revenue/LOR (X1)	Local taxes Regional retribution The results of the management of separated regional assets	Ratio
2.	Capital Expenditure/CE (Y)	Land capital expenditure Capital expenditure on equipment and machinery Building and building capital expenditure Capital expenditures for roads, irrigation, and networks Capital expenditure on other fixed assets	Ratio
3.	General Allocation Fund/GAF (X2)	General transfer funds	Ratio
4.	Economic Growth/EG (Z)	GRDP	Ratio

Source: Processed by researchers (2022)

#### 4. Results

The results showed that the model fulfilled the fit model criteria. All indices have *p*-values <0.001 or below the criteria set at *p*-value <0.10. The results are shown in Table 2.

**Table 2.** Fit Model Test

Model fit and quality indices	Index	P-Value	Criteria	Description
Average path coefficient (APC)	0.342	0.001	0.10	Fit
Average R-squared (ARS)	0.613	0.001	0.10	Fit
Average Adjusted R-squared (AARS)	0.458	0.001	0.10	Fit
Average Block VIF (AVIF)	1.442	≤ 5 and ideally ≤ 3.3	Fit	
Average Full Collinearity VIF (AFVIF)	10.551	≤ 5 and ideally ≤ 3.3	Fit	
Tenenhaus Gof (GoF)	0.783	Small ≥0.1, medium ≥0.25, large ≥0.36	Large	

Source: WarpPLS 7.0, Data Processed 2022

Moreover, the hypothesis testing to examine the relationship between local own-source revenue and capital expenditure showed the path coefficient value generated in the influence of local own-source revenue on capital expenditure of 0.51 with a significance of *p*-value <0.01 (>0.10) (Table 3). Accordingly, the first hypothesis stating that the general allocation fund variable positively and significantly influences capital expenditure was accepted. The findings found that local revenue has a

positive influence on capital expenditures. It means that local revenue is more likely to increase the allocation of capital expenditures by looking at the needs of the government. The results in this study also show a significant amount, which means that an increase follows every increase in local revenue in capital expenditure. It is in line with agency theory, where the relationship between the central government and local governments in the distribution of balancing funds and the relationship between the community represented by the principal and local government as agents. It can be conducted by providing adequate facilities and infrastructure financed from capital expenditures that are budgeted annually, while the capital expenditures are sourced from local own-source revenue.

The results are in line with research by Hair et al. (2012), Mulyani (2016), Susanti & Fahlevi (2016), Lestari (2017), Kis-Katos & Sjahrir (2017), and Lewis (2013; 2019) stating that local revenue affects capital expenditure. It empirically proves that capital expenditure can be influenced, one of which is local revenue. According to Government Regulation No. 12 of 2019, the local budget is prepared in accordance with the needs of the implementation and the ability of the regions to generate income. In the preparation of the local budget, capital expenditures should be adjusted to the needs of the region by taking into account the local own-source revenue obtained so that if the regional government wants to increase capital expenditures for public services and better public welfare, the regional government should strive to obtain greater own-source revenue.

**Table 3.** Path Coefficients

Variable	Sign	Coefficient	P Value	Full Collin VIF
LOR	+	0.51	0.01	5.288
GAF	+	0.38	0.01	3.779
LOR X EG	+	0.34	0.01	21.189
GAF X EG	+	0.14	0.08	2.180
R squared		0.613		
Adjusted R Square		0.458		
Q Square		0.672		

Note: LOR= Local own-source revenue; CE= Capital Expenditure; GAF= General Allocation Fund; EG= Economic Growth

Dependent Variable: Capital Expenditure

Source: WarpPLS 7.0, Data Processed 2022

The test results between local own-source revenue on capital expenditures and economic growth as a moderating variable of the capital showed the path coefficient value generated in the influence between local own-source revenue on capital expenditures and economic growth as a moderating variable of 0.34 with a significance of *p*-value <0.01 (>0.10). Thus, the second hypothesis that the local own-source revenue variable on capital expenditure with economic growth as a moderating variable has a positive and significant influence was empirically supported. The findings found that local revenue positively affects capital expenditure as a moderating variable. Economic growth in this study is used as a moderating variable. The economic growth rate strengthens local own-source

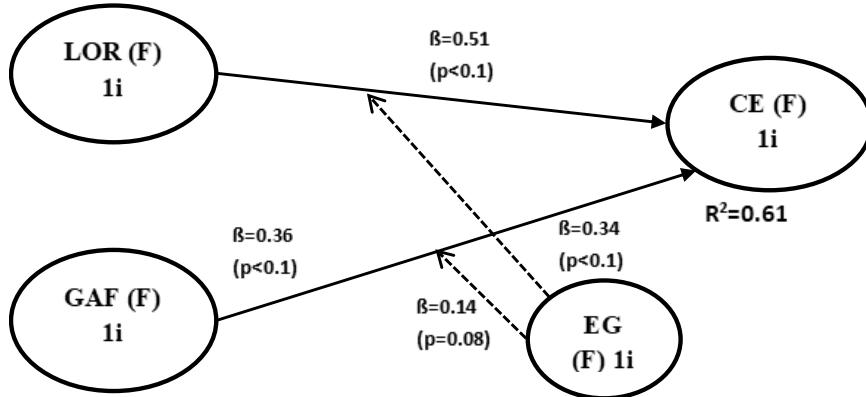
revenue's influence on capital expenditures. The higher the level of economic growth is more likely to increase the local own-source revenue for capital expenditures. It means the increasing economic growth will be more likely to have the impact of increasing population per capita so that the population's level of consumption and productivity increases. Good economic growth should be supported by adequate infrastructure or facilities to facilitate economic activities. Usually, good economic growth will be more likely to increase the capital expenditure of the regional government from year to year to improve existing facilities and infrastructure. However, capital expenditure was usually adjusted to the budget that has been provided. The results align with research by Rini et al. (2018) and Jaya & Dwirandra (2014), stating that local government revenue positively affects capital expenditure with economic growth as a moderating variable.

The test results between general allocation funds and capital expenditures showed the path coefficient value generated in the effect of general allocation funds on capital expenditures of 0.38 with a significance of  $p$ -value  $<0.01$  ( $>0.10$ ). Therefore, the first hypothesis states that the local own-source revenue variable positively and significantly influences the capital expenditure received. The findings showed that general allocation funds positively influence capital expenditures. It means that every time there is an increase in the general allocation fund, the capital expenditure budget will be more likely to increase. In line with agency theory, the relationship between the central government and local governments in the distribution of balancing funds and the relationship between the people represented by the principals and local governments as agents in the preparation of local government budgeting.

The results are in line with research conducted by Kuntari (2019), Mulyani (2016), Nasution (2017), and Rini et al. (2018), stating that general allocation funds affect capital expenditure, which empirically proves that capital expenditure can be influenced by one of them by general allocation fund. It indicates that the behavior of regional expenditures, especially capital expenditures, will be greatly influenced by the source of revenue from the general allocation fund. The higher the general allocation fund, the higher the capital expenditure allocation.

The test results between general allocation funds on capital expenditures and economic growth as a moderating variable of the capital showed the path coefficient value generated in the influence between general allocation funds on capital expenditures and economic growth as a moderating variable of 0.14 with a significance of  $p$ -value  $<0.08$  ( $>0.10$ ). Therefore, the fourth hypothesis was accepted, stating that the general allocation fund variable on capital expenditures with economic growth as a moderating variable has a positive and significant influence (Figure 2). The research found that general allocation funds positively influence capital expenditures with economic growth as a moderating variable. It means that the higher the level of economic growth is more likely to increase the general allocation fund for capital expenditures. The increasing economic growth impacts increasing the income per capita of the population so that the population's level of consumption and productivity increases. In addition, higher funds from the state budget are allocated with the aim of financial equity between regions to finance budgeting needs in implementing decentralization. Good economic growth in an

area requires adequate facilities and infrastructure, where the development of these facilities and infrastructure uses funds sourced from general allocation funds and capital expenditures. So, economic growth strengthens the relationship between general allocation funds and capital expenditures. The results align with research by Sugiarni & Supadmi (2014); the allocation of funds affects capital expenditures with economic growth as a moderating variable.



Source: WarpPLS 7.0 output (2022)

Figure 2: Research Results Model

## 5. Conclusion

The results concluded as local revenue has a positive and significant effect on capital expenditure, economic growth has the role of strengthening the positive and significant relationship between local revenue and capital expenditures, the general allocation fund has an effect on capital expenditure, and economic growth has a role in strengthening the positive and significant relationship between general allocation funds and capital expenditures.

The limitation of this research is that available data is only accessed from 29 provinces. It was because five provinces do not have general allocation funds: Jakarta, East Java, Bali, East Nusa Tenggara, and East Kalimantan. The study also only examined the data in the 2015-2019 period. Lastly, the variables in this study can only explain economic growth as a moderating variable. Further studies should be conducted in the latest year to obtain more relevant information. Further researchers are advised to use different variables such as special and profit-sharing funds. Moreover, many other variables can still be used as moderating variables, such as capital expenditures, the remaining budget calculations, special autonomy funds, balancing funds, and the COVID-19 pandemic.

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