

# **The Effect of Local Revenue and Matching Grant on Capital Expenditures and Implications on Economic Growth in Indonesia**

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**Abstract:** *This study aim is to test and prove empirically the effect of local revenue (PAD) and Matching Grant (DP) on Capital Expenditures (BM) and their Implications on Economic Growth (PE). The study population is 34 provincial governments in Indonesia. The samples are 33 Provinces with 165 observations. The data used is GDP at constant prices to see economic growth, Local Revenue, Matching Grant and Expenditure of Local Government from 2011 to 2015. The data is collected from Financial Audit Agency (BPK) and Central Statistic Bureau (BPS) of Indonesia Republic. The data is tested by Path Analysis. The analysis result shows that Local Revenue and Matching Grant have positive and significant effect on Capital Expenditure. Furthermore, Local Revenue and Matching Grant have positive and significant effect on Economic Growth, while Capital Expenditure has negative and insignificant effect on Economic Growth.*

**Keywords:** *Local Local Revenue, Matching Grant, Capital Expenditure, Economic Growth*

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## **I. INTRODUCTION**

Economic Growth is a changing process of a country's economic conditions in a sustainable way towards a better one. Economic growth is characterized by higher productivity and income per capita of population which aims to improve the welfare level of people. The indicator used to measure macroeconomic growth is the Gross Domestic Product (GDP) to describes the market value of all goods and services produced in economy over a period of time. Higher level of a country's GDP means better development in the country.

Regional concept of Economic Growth is known as Gross Regional Domestic Product (GRDP). It is an economic indicator of a Region to describe the economic development. The calculation of GRDP which is done at current prices or at constant prices to give an idea of the success rate of development as well as the level of Economic Growth from various sectors of production and business managed by society. GRDP is basically the amount of added value generated by all business units within a particular Region, or is the sum of value of final goods and services produced by all economic units (Sukirno, 2010). The Indonesian economy in last five years (2011-2015) experienced an average growth rate of 0.41%, where in 2011 Economic growth was still 6.44% and in 2015 only 4.79%.

## **II. LITERATURE REVIEW**

### **Economic growth (PE)**

Economic growth can be interpreted as an increase in production capacity of goods and services of a country/region. Economic growth is often measured by the growth of Gross Domestic Product (GDP/GRDP). Gross Domestic Product (GDP) is the market value of all final goods and services produced in economy over a period of time (Mankiw 2006). In regional concept of Gross Domestic Product is known as Gross Regional Domestic Product (GRDP). GRDP is a macroeconomic indicator of a Region to describes the presence or absence of regional economic development. GRDP is basically the amount of added value generated by all business units within a particular Region, or sum value of final goods and services produced by all economic units.

Muritala and Taiwo Anayomi (2011), Chude et al (2013), Tajudeen and Fasanya (2013) and Nwaeze who conducted research in Nigeria found that Government expenditure had a positive effect on Economic Growth. Therefore, government needs to enlarge its budget with priority of economic sectors such as industry, agriculture and infrastructure development to attract investors. The main determinants of growth are domestic investment, infrastructure and expenditure on education and health. Al-Fawwaz (2016) also recommended the need for Jordan Government to increase its expenditure on infrastructure, social and economic activities and support the private sector to accelerate economic growth. In line with opinion above, Todaro (1997) describes that there are three main factors or components in Economic Growth namely; Capital accumulation covering all forms of new investments invested in land, physical equipment and capital or human resources; Population growth that will multiply capital accumulation and technological progress.

**Capital Expenditure (BM)**

According to Halim (2004: 73), "Capital Expenditure is the Local Government expenditure with benefits exceeding one fiscal year and will add to assets or wealth of Regions and will add routine expenditures such as maintenance costs to Public Administration Group". Based on Regulation of Domestic Minister Number 59 year 2007 (Amendment to Permendagri No. 13 of 2006) Article 53, Capital Expenditures as referred to in Article 50 letter c shall be used for expenditures made in procurement or tangible fixed assets with value more than 12 (twelve) months used in Government activities.

**Local Revenue (PAD)**

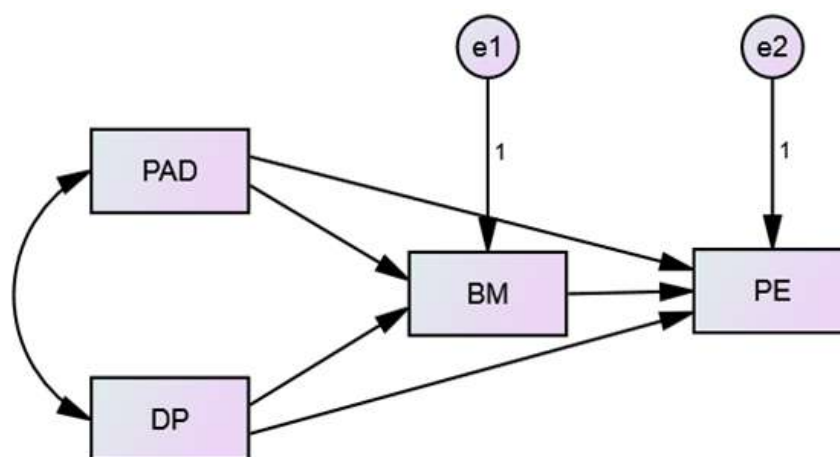
According to Halim (2004: 67), Local Revenue (PAD) is all Regional revenue derived from the original economic source of the Region. The Group of Original Regional Income is separated into four types of revenue: Regional taxes, regional levies, results of Regional-owned enterprises and results of management of property belonging to separated Area and other Local Revenue. Furthermore, according to Mardiasmo (2002: 132), Local Revenue is the revenue earned from the Regional tax, regional retribution of Regional Government owned company, result of separated regional wealth management, and other Real Regional Revenue.

**Matching Grant (DP)**

Matching Grant is a fund from the State Budget (APBN) allocated to Region to finance the needs of Region. Matching Grant is classified into 3 types of income (for Province), namely: Tax/Non-Tax Profit Fund, General Allocation Fund and Special Allocation Fund. (Halim 2004) Local Government allocates funds in form of capital expenditure budget in APBD to add fixed assets. The amount of Capital Expenditure allocated by Regional Government in APBD depends on amount of Regional Local Revenue (PAD), Matching Grant and Other Legal Income.

**III. RESEARCH METHODS**

The this study purpose is to test and obtain empirical evidence the effect of Local Revenue and Matching Grant on Capital Expenditure and also the effect of Local Revenue, Matching Grant and Capital Expenditure on Economic Growth. The model tested is shown in figure 1 below.



**Figure 1.** Path Diagram

Figure 1 is a complete diagram with two exogenous variables namely Local Revenue (X1) and Matching Grant (X2) and two endogenous variables namely Capital Expenditure (Z) and Economic Growth (Y). Furthermore, equation of path analysis are below.

$$Y = \gamma_{yx1} X 1 + \gamma_{yx2} X 2 + \varepsilon 1$$

$$Z = \gamma_{zx1} X 1 + \gamma_{zx2} X 2 + \beta_{zy} Y + \varepsilon 2$$

Then these are standardized into:

$$Y = \rho_{yx1} X 1 + \rho_{yx2} X 2 + \rho_y \varepsilon 1$$

$$Z = \rho_{zx1} X 1 + \rho_{zx2} X 2 + \rho_{zy} Y + \rho_z \varepsilon 2$$

Where :

$\gamma$	:	path coefficient of exogenous variables to endogenous variables
$\beta$	:	path coefficient among endogenous variables
$\varepsilon_1$ dan $\varepsilon_2$	:	error variables or unexplained variance of researched variables
X1	:	Local Revenue (PAD)
X2	:	Matching Grant (DP)
Z	:	Capital Expenditure (BM)
Y	:	Economic Growth (PE)

#### IV. RESEARCH RESULT

The AMOS analysis result can be shown in figure 2 below. It is continued by the explanation of the analysis result.

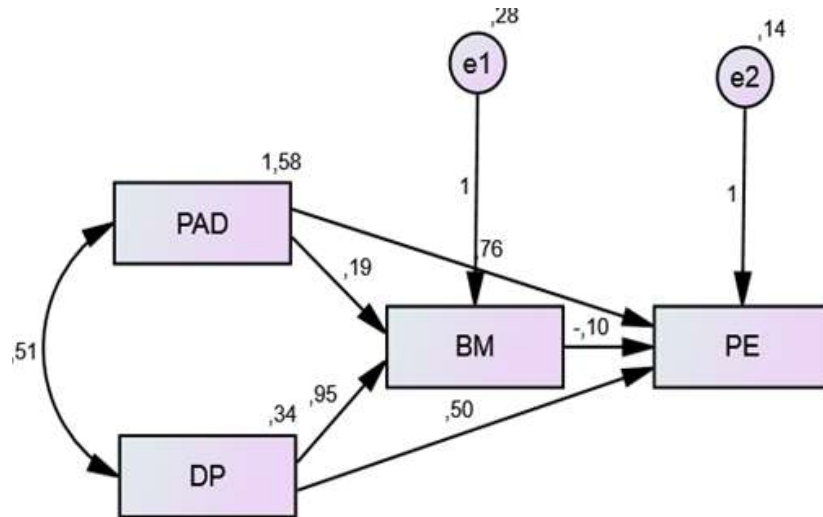


Figure 2. AMOS Analysis Result

##### 1. Direct effect of Local Revenue (PAD) on Capital Expenditure (BM)

The hypothesis H1 is Local Revenue has a positive and significant effect on Capital Expenditure. AMOS output results shows C.R value of 4.205 and a probability value of 0.000. Thus the probability value is smaller than the real level of 5%, It rejects H0, in other words the path of Local Revenue on Capital Expenditure is significant. The magnitude the direct effect of Local Revenue to Capital Expenditure is 0.268, thus the first hypothesis is accepted.

##### 2. Direct effect of Matching Grant (DP) against Capital Expenditure (BM)

The second hypothesis is, Matching Grant has positive and significant effect on Capital Expenditure. AMOS output results shows C.R value is 9.466 and a probability value is 0.000. Thus the probability value is smaller than the real level of 5%, it rejects H0, in other words that path of Matching Grant to Capital Expenditure is significant. Magnitude the direct effect of Matching Grant on Capital Expenditure is 0.603, thus the second hypothesis is accepted.

##### 3. Direct Effect of Local Revenue (PAD) on Economic Growth (PE)

The third hypothesis is Local Revenue has a positive and significant effect on Economic Growth. AMOS output results show the C.R value is 21.915 and probability value is 0.000, thus the probability value is smaller than the real level of 5%. It rejects H0, in other words path of Local Revenue on Economic Growth is significant. The magnitude of direct effect of Local Revenue on Economic Growth is 0.815, therefore, third hypothesis or accepted.

##### 4. Direct effect of Matching Grant (DP) on Economic Growth (PE)

The fourth hypothesis is Matching Grant has positive and significant effect on Economic Growth. AMOS output results show the C.R value is 5.666 and probability value is 0.000. The probability value is greater than the real level of 5%. It reject H0, in other words that path of Matching Grant on Economic Growth is significant. The magnitude of direct effect of Matching Grant on Economic Growth is 0.249, thus the fourth hypothesis is accepted.

### **5. Direct effect of Capital Expenditure (BM) on Economic Growth (PE)**

The fifth hypothesis is Capital Expenditure has a positive and significant effect on Economic Growth. AMOS output results show that C.R value is (-) 1.839 and probability value is 0.066. The probability value is greater than the real level of 5%. It accept H<sub>0</sub>, in other words the path of Capital Expenditure on Economic Growth is not significant. The magnitude the direct effect of Capital Expenditure on Economic Growth is (-) 0.080, thus, fifth hypothesis is rejected.

## **V. DISCUSSION**

### **The Effect of Local Revenue on Capital Expenditure.**

This study found that Local Revenue has a positive and significant effect on Capital Expenditure. This indicates that higher Provincial Government funding to Local Revenue during the period of 2011 to 2015 has been used appropriately to finance the development of facilities and infrastructure in order to provide services to public by increasing the portion of Capital Expenditure.

This study result is consistent with Darwanto and Yustikasari (2007) to found that Local Revenue have a positive and significant correlation to Capital Expenditure. It means the Local Revenue has a significant and positive effect on capital expenditure. These findings also confirm the results Sianipar (2011), Mawarni At all (2013), Rafi (2016), Kurniawan (2016) that Local Revenue has a positive and significant effect on Capital Expenditure.

### **The Effect of Matching Grant on Capital Expenditures.**

This study found that Matching Grant has positive and significant effect on Capital Expenditure. It shows that higher Provincial Government funding from Matching Grant in period of 2011 to 2015 has been used appropriately to finance the development of facilities and infrastructure in order to provide services to public by increasing the portion of Capital Expenditure. This study result is consistent with Handayani (2009) to found that Matching Grant significantly affect on Capital Expenditure. These findings also confirm the results of Liandani (2015), Rafi (2016), and Kurniawan (2016) that Matching Grant has a positive and significant effect on Capital Expenditure.

### **The Effect of Local Local Revenue on Economic Growth.**

This study found that Local Revenue has a positive and significant effect on Economic Growth. It can be explained that Local Revenue directly affects Economic Growth. Regional GDP growth shows an upward trend, indicating that higher Local Revenue contributes to increase people's purchasing power, higher Economic Growth showed the increase of community's ability due to increase of people's income which also effect the higher people's purchasing power.

This study results consistent with Maryati and Endrawati (2010) studies to found that Local Revenue (PAD) has a significant and positive effect on Economic Growth of local government at Regency/City in West Sumatera Province. This means that higher Local Revenue generated by Local Government can increase GDP of local government. This finding is consistent with Amnah's (2014), Susanto and Marhamah (2016) to found that Local Revenue has a positive and significant effect on Economic Growth.

### **The Effect of Matching Grant on Economic Growth.**

This study found Matching Grant have positive and significant effect on Economic Growth. It can be explained that higher Matching Grant can increase Economic Growth increase. Conversely, lower Matching Grant will decreases the Economic Growth The Matching Grant should be managed rightly and used efficiently and effectively to improve service to community. The average capital expenditure of 18.80% indicates that largest share of regional revenues is still spent on personnel expenditure so the effect on Economic Growth is still small. This study result is consistent with Sihite (2010) to found that Matching Grant have a significant effect on Economic Growth.

### **The Effect of Capital Expenditure on Economic Growth.**

This study found that Capital Expenditure has negative and insignificant effect on Economic Growth. It can be explained that contribution of Capital Expenditure has not significant effect on Economic Growth improvement. Average capital expenditure realization is 18.80%, it indicates that largest share of local revenues is still spent on personnel expenditure so the effect on Economic Growth is still small.

This study result is consistent with Sihite research (2010) to found that Capital Expenditure has no effect on Economic Growth. These findings also confirm the results of a study by Mawarni et al (2013) to found that Capital Expenditures have no effect on Economic Growth, Gunantara and Dwiranda (2014) also stated that moderation test shows that Capital Expenditures weaken Local Revenue effect on Economic Growth, while

Capital Expenditures as moderating variables cannot moderate the effect of General Fund on Economic Growth. It is caused by allocation of regional income for Capital Expenditure is not used rightly so the project has less advantage. This result is not consistent with Alexiou (2009), Prasetya (2011), Muritala and Taiwo Abayomi (2011), Hidayah (2011) that Capital Expenditure has a positive and significant effect on Economic Growth.

## **VI. CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusion**

Based on analysis results, it can be drawn conclusion below.

1. Local Revenue has a positive and significant effect on Capital Expenditure. It shows that Local Revenue (2011-2015) has been used appropriately to finance the construction of facilities and infrastructure in order to provide services to public by increasing the portion of Capital Expenditure.
2. Matching Grant has a positive and significant effect on Capital Expenditure. This indicates that Matching Grant (2011-2015) has been used appropriately to increase the share of Capital Expenditures.
3. Original Regional Revenues have a positive and significant effect on Economic Growth. This shows that optimization of tax withdrawals to increase the Local Revenue have a positive effect on Economic Growth.
4. Matching Grant has a positive and significant effect on Economic Growth. It shows that Matching Grant has been used appropriately to give a positive effect on Economic Growth in Region as seen in Economic Growth.
5. Capital Expenditure has negative and insignificant effect on Economic Growth. This shows that allocation of Capital Expenditure is still very small, it cannot not gives a positive effect on Economic Growth in Region.

### **Suggestions**

Based on above conclusions, suggestions are proposed below

1. Local Revenue should be increased by optimizing the tax revenue and retribution area that has not given maximum contribution such as vehicle tax for heavy equipment that many operate as project vehicle. On other hand, they should attract investors by providing various facilities in licensing services to try in area so as to open opportunities to increase other sectors in tax revenue and manage the potential of natural resources to attract as many tourists as possible to visit the region.
2. Matching should be used optimally Grant in order to provide maximum results to improve the welfare of community by maximizing the budget by build facilities and infrastructure to facilitate the wheels of economy growth.
3. The new Capital Expenditure reached 18.80% of total Expenditure, it is still very far from the target set by Government of 28%. Therefore it is necessary to reallocate the budget to meet the target. The Central Government needs to establish a regulation to regulates the budget allocation mechanism so that budget of each Provincial Government can be effective and right on target, to see the amount of funds from some local governments that are only stored in Bank so as not to provide maximum benefits to development in Region.

### **Research Limitations**

This research conducted is global to know and analyze the effect of Local Revenue and Matching Grant on Capital Expenditure (structure I), and Local Revenue, Matching Grant and Capital Expenditure on Economic Growth (Figure 2). To complete the next review it is advisable to include elements of Other Legal Revenue to Revenue group, and elements of personnel expenditure and expenditure on goods and services in shopping group so that comprehensive picture of effect of APBD on Economic Growth can be analyzed as a whole.

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