Conference Paper

The Effect of Fiscal Balance Funding on Regional Economic Growth: Evidence from East Java Province Period 2015-2017

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Abstract

This research aims to determine the effect of Fiscal Balance Funding on regional economic growth in East Java Province period 2015-2017. The data used in this research are Local Own Revenue (Pendapatan Asli Daerah), General Allocation Fund (Dana Alokasi Umum), Specific Allocation Fund (Dana Alokasi Khusus) and Village Fund (Dana Desa), Capital Expenditure (Belanja Modal) and Regional Gross Domestic Bruto (Produk Domestik Regional Bruto) from all district in East Java Province. The data used are obtained from the Directorate General of Fiscal Balance and the Central Bureau of Statistics. The sample in this study was 30 districts/cities in East Java Province and analytical method used is multiple linear regression analysis and path analysis. According to the calculation results based on the magnitude of the direct influence coefficient of the five variables shows that there is an indirect effect of District Own Revenue and General Allocation Fund on Regional Economic Growth through Capital Expenditure. Based on these results, the researchers provide suggestions that it is expected to allocate Special Allocation Fund for expenditures that have high impact on productive activities such as capital expenditure that can support regional economic growth.

Keywords: Fiscal Balance Funding, Capital Expenditurel, Regional Economic Growth

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1. Introduction

The implementation of fiscal decentralization aims to maintain fiscal sustainability, reduce inequality both vertically and horizontally. Vertical imbalance is gap between the Center and Regions and horizontal imbalance is gap among regions. One of the instruments used in implementing fiscal decentralization is the transfer to the Regional and Village Funds for funding accelerated development programs and achieving national priority target programs.

Based on data from the Ministry of Finance of the Republic of Indonesia (2018) that each year Transfer to the Regional and Village Funds cover more than 70 percent of the total expenditure of all local governments. Related to this, Transfer to the Regional and

Village Funds has a strategic role in sustaining the performance of all local governments to improve the quality of public services, create jobs, alleviate poverty, and improve the distribution of financial capabilities between regions. Transfer to the Regional and Village Funds includes several types of funds with different allocation objectives. In this research only the General Allocation Fund, Specific Allocation Fund, and Village Fund will be discussed. The others fund will be discussed are Local Revenue and Capital Expenditure. To make it clear, below are the definition of each terminology we used:

- General Allocation Fund, that is, funds allocated for the distribution of inter-regional financial capacity to fund regional needs originating from the National Budget

- Specific Allocation Fund, that is, Special Allocation Fund (DAK) is the fund with the aim to help fund special activities of regional affairs in line with the national development priority

- Village Funds are funds originating from the National Budget intended for villages that are transferred through provincial or district Government Budget and are prioritized to empower village communities and carry out physical and non-physical development

- Local Own Revenue is revenue that is sourced and collected by the regional government which consists of regional taxes, regional levies, profits from regionally owned enterprises and other legitimate regional original revenues

- Capital Expenditures are expenditures made in the context of capital formation nature of adding fixed assets / inventory that provides benefits for more than one period accounting, including expenses for maintenance costs that are maintain or increase the useful life, increase the capacity and quality of assets

Some research such as Bahl and Linn (1992) stated that fiscal decentralization will increase economic efficiency, so that is expected to improve the efficiency of public services and will encourage regional economic growth. The results of the research from Kusuma (2016) explained that fiscal decentralization in Indonesia have an impact on economic growth. Based on the theoretical foundation and the results of previous studies, so that the objectives in the study are:

1. To analyze the effect of Local Own Revenue (LOR), General Allocation Fund (GAF), and Specific Allocation Fund (SAF) on Capital Expenditure (CE) in East Java Province period 2015-2017

2. To analyze the effect of Local Own Revenue (LOR), General Allocation Fund (GAF), Specific Allocation Fund (SAF), Village Fund (VF), and Capital Expenditure (CE) on economic growth (G) in East Java Province period 2015-2017

3. To analyze the indirect effect of Local Own Revenue, General Allocation Fund, and Specific Allocation Fund on economic growth through capital expenditure in East Java Province period 2015-2017

2. Method

This study aims to see the effect of Local Own Revenue, General Allocation Fund, Specific Allocation Fund, and Village Fund on capital expenditure and economic growth in East Java Province for the period 2015-2017. This study uses six variables, namely local revenue, general allocation funds, special allocation funds, village funds, capital expenditure and economic growth. The data used is panel data, which is a combination of two data, namely time series data and cross section data. The data times series is taken from a data period of 3 years namely 2015-2017. While the cross section data is taken from regional original income data, general allocation funds, special allocation funds, village funds, capital expenditure and GRDP on the basis of constant prices of cities / districts. The population in this study were 30 districts / cities in East Java consisting of 29 districts and 1 city. The analytical method in this study uses multiple linear regression analysis which is divided into two structures, namely as follows:

1. Structural Equation I

$$Y_{1it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon_1$$

Explanation:

Y_{1it} = Capital Expenditure

α = Constanta

$\beta_1 X_{1it}$ = Local Revenue Regression Coefficient

$\beta_2 X_{2it}$ = General Allocation Fund Regression Coefficient

$\beta_3 X_{3it}$ = Specific Allocation Fund Regression Coefficient

ε_1 = Standard error

2. Structural Equation II

$$Y_{2it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 Y_{5it} + \varepsilon_2$$

Explanation:

Y_{2it} = Economic Growth

α = Constanta

$\beta_1 X_{1it}$ = Local Own Revenue Regression Coefficient

$\beta_2 X_{2it}$ = General Allocation Fund Regression Coefficient

$\beta_3 X_{3it}$ = Specific Allocation Fund Regression Coefficient

$\beta_4 X_{4it}$ = Village Fund Regression Coefficient

$\beta_5 Y_{5it}$ = Capital Expenditure Regression Coefficient (BM)

ε_2 = Standard error

After knowing the path analysis coefficient (Path Analysis). Path analysis aims to find out how much an independent variable affects the dependent variable. The research design can be described as follows:
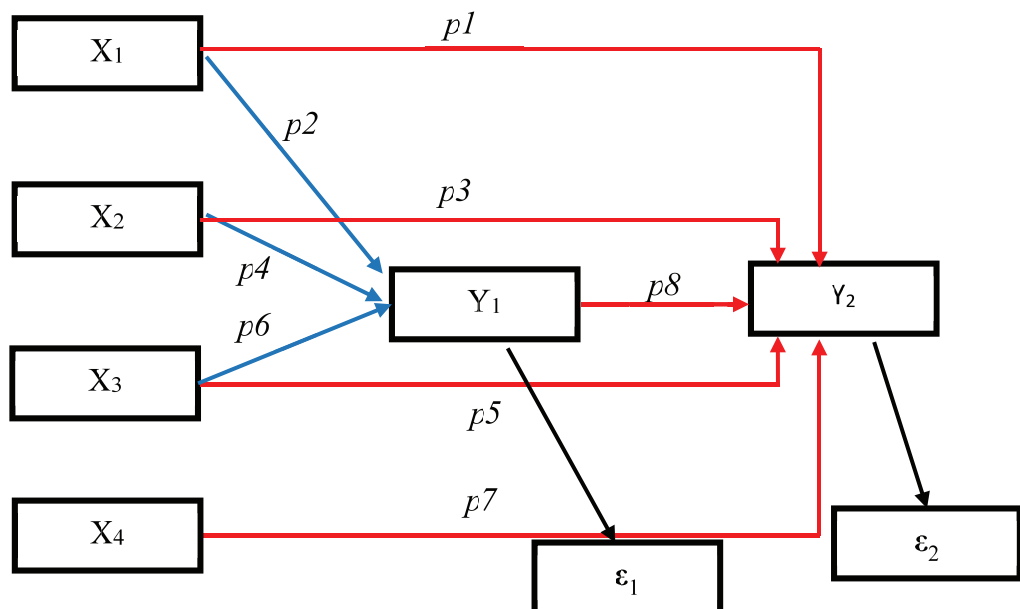

Figure 1: Path Analysis Research Design.

3. Results and Discussion

3.1. The effect of LOR, GAF, and SAF on CE in East Java Province

Regression calculation results to determine the effect between capital expenditure with PAD, General Allocation Fund (GAF), and Specific Allocation Fund (SAF). The estimated

method used is pooled least square. The following are the results of the regression structural I:

TABLE 1: The Result of The Regression Structural I.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25.94921	0.155952	166.3927	0.0000
LOR	3.28E-13	1.51E-13	2.170029	0.0328
GAF	6.97E-13	1.83E-13	3.800768	0.0003
SAF	8.53E-14	3.24E-13	0.263259	0.7930

Source: Data proceed (2019)

Based on table 1 about the results of regression analysis the regression equation is:

$$Y_{1it} = 25,94921 + 3,28E - 13X_{1it} + 6,97E - 13X_{2it} + 8,53E - 14X_{3it} + \varepsilon_1$$

Atau

$$Y_{1it} = 25,94921 + 3,28 \times 10^{-13} X_{1it} + 6,97 \times 10^{-13} X_{2it} + 8,53 \times 10^{-14} X_{3it} + \varepsilon_1$$

The regression coefficient in the LOR variable is 3.28×10^{-13} and is positive. The significance value is 0.0328 smaller than 0.05 and the value of t count is 2.170029 greater than t table which is 1.98793. This means that the LOR variable partially has a significant effect on the capital expenditure variable, therefore H_0 is rejected. The regression coefficient which is worth 3.28×10^{-13} explains that the LOR variable increases by 1 point (in rupiah), it will increase the capital expenditure variable by 3.28×10^{-13} points (in rupiah). This shows that in this study LOR has an influence on capital expenditure.

This is in line with the research conducted by Irvan and Karmini (2016) in Bali Province who suggested that LOR had a positive and significant effect on capital expenditure. And research conducted by Kusuma (2016) in South Sulawesi Province shows that LOR has a positive and significant influence on capital expenditure. However, this is not in line with the research of Rizani and Syam (2017) in the Province of South Kalimantan who found that local revenues did not significantly influence capital expenditure.

The results of this study indicate that it is consistent with the research conducted by Rizani and Syam (2017) in South Kalimantan Province who suggested that general allocation funds have a significant effect on capital expenditure. However, the research is not in line with Kusuma's (2016) study in South Sulawesi Province which suggested that general allocation funds had a negative and not significant effect on capital expenditure.

Special allocation funds can be allocated from the National Budget to certain regions to finance special needs. These special needs are needs that cannot be estimated using

the general allocation formula and needs which are commitments originating or national priorities. Special allocation funds include 40% of the reforestation fund. Authority in allocating SAK is relatively limited because the fund is basically linked to financing certain activities including reforestation activities. In addition, the obligation to provide matching funds amounting to 10% of the total allocation value of special allocation funds in the APBD will certainly shift a number of certain budgets which may actually be intended for the construction of infrastructure facilities that support economic growth. Based on the results of the research, special allocation funds have a non-significant effect because the amount obtained by the district / city is not large enough and must be allocated to other expenditures in addition to capital expenditures such as indirect expenditure, goods and services expenditure and personnel expenditure included in indirect expenditure reached Rp. 28,426,545,330.

3.2. The Effect of LOR, GAF, SAF, VF and Capital Expenditure on Economic Growth in East Java Province

The estimated method used is pooled least square. The following are the results of the regression structural II:

TABLE 2: The Result of The Regression Structural II.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.30746	0.165380	92.55927	0.0000
LOR	1.64E-12	1.71E-13	9.602984	0.0000
GAF	9.84E-13	2.06E-13	4.778247	0.0000
SAF	-2.48E-12	4.95E-13	-5.003254	0.0000
VF	2.64E-12	6.56E-13	4.020164	0.0001
CE	6.34E-13	2.33E-13	2.726745	0.0078

Source: Data proceed (2019)

Based on table 2 about the results of regression analysis the regression equation is:

$$Y_{2it} = 15,30746 + 1,64E-12X_{1it} + 9,84E-13X_{2it} - 2,48E-12X_{3it} + 2,64E-12X_{4it}$$
$$+ 6,34E-13Y_{1it} + \varepsilon_2$$

Atau

$$Y_{2it} = 15,30746 + 1,64 \times 10^{-12}X_{1it} + 9,84 \times 10^{-13}X_{2it} - 2,48 \times 10^{-12}X_{3it} + 2,64 \times 10^{-12}X_{4it}$$
$$+ 6,34 \times 10^{-13}Y_{1it} + \varepsilon_2$$

The regression coefficient on the LOR variable is 1.64×10^{-12} and is positive. The significance value is 0.0000 less than 0.05 and the calculated t value is 9.602984 greater than the value of t table 1.98861. This means that the LOR variable partially has a significant effect on economic growth variables, therefore H_0 is rejected. The regression coefficient worth 1.64×10^{-12} explains that if the LOR variable increases by 1 point (in rupiah) it will increase the variable economic growth by 1.64×10^{-12} points (in units of millions of rupiah). This shows that in this study LOR has an influence on economic growth.

Local revenue is a source of local government spending originating from the regional government levies itself. If the local revenue increases, the funds owned by the regional government to further explore the greater regional potential that is owned which can support increased economic growth. In the case of local revenue in line with the fiscal federalism theory which emphasizes that economic growth can be achieved by implementing regional autonomy and fiscal decentralization. Fiscal Federalism is a theory developed by Hayek (1945), Musgrave (1959) and Oates (1972) (Khusaini, 2006: 45). According to Faridi (2011) states that the main function of fiscal decentralization is increasing the efficiency of the public sector and causing long-term economic growth. This is not in line with the research conducted by Dewi and Suputra (2017) which shows that local revenue has a negative effect on economic growth. However, it is consistent with the research conducted by Irvan and Karmini (2016) which shows that local revenue has a positive and significant effect on economic growth.

3.3. The Effect of LOR, GAF, and SAF on Economic Growth trough Capital Expenditure in East Java Province

This regression analysis was conducted to find out the relationship directly from structural I and structural II regression models. After the results obtained from the direct influence to determine the indirect effect of independent variables on the dependent variable through the variable between. Based on the results of the study it can be seen the relationships between research variables, which are the path coefficients in this study. The following is a summary table of path coefficients.

From Figure 2, a test of the intermediate variable can be used to analyze the pattern of variable relationships with the aim of knowing the direct or indirect effects of a set of independent variables on the dependent variables are:
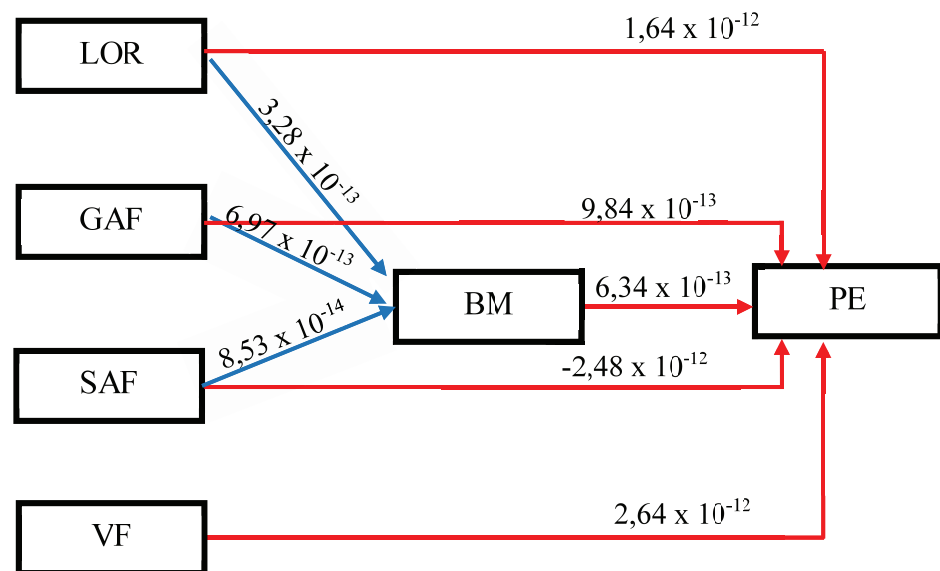
Figure 2: Analysis Path Diagram (Source: Table 3).

4. Conclusion

The research uses data from LOR, GAF, SAF, VF, capital expenditure and economic growth. The study was conducted using data on 30 districts / cities in East Java Province in 2015-2017. By using multiple linear regression analysis and path analysis, the results are as follows:

1. Local Revenue and General Allocation Fund affect capital expenditure because basically both funds are used to provide public facilities and infrastructure. Whereas for special allocation funds there is no effect on capital expenditures because these funds are more used for financing / spending besides capital expenditure such as reforestation activities.

2. Local Own Resource, General Allocation Fund and Village Fund have a positive influence on economic growth. Because these funds are used to explore the potential of the region, increase public services and increase productive economic activities that directly affect economic growth. While special allocation funds have a negative effect on economic growth because these funds are used for activities that are indirectly related to economic growth. Capital expenditure has a positive effect on economic growth because capital expenditure is considered an investment where investment is one component in increasing economic growth.

3. Based on the results of the calculation of the influence coefficient of the six variables, it is evident that there is an indirect influence of Local Own Resource and General Allocation Fund on economic growth through capital expenditure.

Because there is a significant effect of Local Own Resource and general Allocation Fund on capital expenditure and capital expenditure, it has a positive and significant effect on economic growth. There is no indirect influence between Specific Allocation Fund on economic growth through capital expenditure. This is because there is a positive and insignificant influence on Specific Allocation Fund on capital expenditure while capital expenditure has a positive and significant effect on economic growth.

Based on the conclusions and the results of the analysis that have been made, the suggestions for further research and parties involved are as follows:

1. East Java Provincial Government

   It is expected to allocate Special Allocation Fund for expenditures that have more impact on productive activities such as capital expenditure that can support economic growth.

2. Central Government

   It is expected to be able to provide more flexibility in the use of Special Allocation Fund for regional interests that are able to increase economic growth and in allocating Special Allocation Fund to regions more in line with regional interests, so that in addition to increasing national economic growth it can increase regional economic growth.

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