

DETERMINATING THE VALUE OF CAPITAL EXPENDITURE ALLOCATION IN INDONESIA LOCAL GOVERNMENT

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Abstract

Capital expenditure allocation is aimed to preservation and expansion of local government fixed assets that provide long-term benefit. This paper investigates the factors that affect the capital expenditure allocation in Indonesian local government. Employing a panel pooled data-regression (fixed effect), our results reveal that local productivity, local funding, local budget requirement, and local establishment status are related to the value of capital expenditure. This research found that efficiency of capital expenditure management is related with fiscal dependence.

Keywords: Capital Expenditure, Local Productivity, Local Funding, Local Budget Requirement, and Local Establishment Status.

JEL Classification: H72, H76, R58

1. Introduction

The practice of local capital expenditure management in Indonesia is contradicting the existing laws and regulation. The studies on local government budget execution in Indonesia shows that in average, local government only realized 95% from their main budget for capital expenditure, and the average amount of total revenue allocated for capital expenditure is still below 30% (DJPK, 2013). The regulation of home affairs ministry number 37 of 2012 regulates that in order to increase regional productivity, capital expenditures should be allocated minimum 30% of their revenues. The regulation indicates that local government tends to not trying for optimizing the allocation of capital expenditure

in order to increase the productivity of the area.

Based on the problems described above, this research aims to re-examine the factors that affect the value of capital expenditure allocation in the local government of Indonesia. The analysis is performed by tested three (3) aspects: local productivity, funding, and budget requirement. The aspects of regional productivity will be proxied with PAD. Meanwhile, the funding aspect will be proxied with the General Allocation Fund (Dana Alokasi Umum-DAU), Specific Allocation Fund (Dana Alokasi Khusus-DAK), and the level of fiscal dependency. The aspects of the budgetary needs is proxied with the Territorial Coverage (Luas Wilayah-LW). This research use the perspective of local government characteristic

differences in the form of local government types (Regency/Municipal), location (Java/non-Java), and the status of the areas establishment (main region/new autonomous) - with Tenure as control variables.

2. Conceptual Framework

2.1. Local Government Budget for Revenue and Expenditure (Anggaran Pendapatan dan Belanja Daerah-APBD)

APBD provides an overview about future financial plan on total income, expenditure, surplus/deficit, funding, and the work program and activities that will be performed by local government (Mahmudi, 2016: 168). The function of APBD is to be a tool used by local government to support the creation of public accountability. The concept of public accountability is associated with the increase of organizational performance, so that in the implementation of regional autonomy a performance oriented financial management and regional budgetary system is needed (Mardiasmo, 2004: 38).

The problems of budget arrangement in the local government in Indonesia is the conflict interest among the local government members. Widanaputra & Mimba (2014) state that the process of participative budgeting on the local government in Indonesia tends to cause a budgetary slack due to the conflict of interest among the government members. The concept of transparency is necessary to generate budget that reflects local needs better. The commitment of budget transparency will create a thorough evaluation by the central government on local governments, both in the budgeting process and reporting (Sedmíhradská, 2015).

Capital expenditure is a local government spending disclosed in APBD. The ideal practice of capital expenditure should follow the corridors regulated in the existing law and regulation in order to achieve an increase on local productivity. The increase in the local productivity can be achieved when local government does not

depend on the transfer of revenue from the central government. (Galiński, 2015) – states that in Poland, the fluctuations of local capital expenditure affects the fluctuations of local debt. The study indicates that local debt has a positive correlation with local productivity. Local productivity is a key success of region in achieving a self-reliance, so there is a need for investment strategy in allocating capital expenditure into the local budget in Indonesia.

2.2. Capital Expenditure

Capital expenditure is a budgetary expenses for the acquisition of fixed assets and other assets which give a benefit for more than one accounting period (PP. 71/2010). The allocation of capital expenditures is aimed for the acquisition of the land, buildings, equipments, and intangible assets. Regulation No.13 of 2006 on Local Financial Management regulates that capital expenditure is used for expenses incurred in order to procure tangible fixed assets that have economic benefit for more than 1 (one) year to be used in government activities. The use of local government capital expenditure can be performed by expanding the development of productive fixed assets (Tuna et al., 2015).

The success of local government investment in order to realizing the capital expenditure requires an analysis on situation and condition of each region. The analysis process is expected to provide an accurate information for decision-making purposes. The accuracy of information is needed by the local politicians (people's representatives) and the local government in decision-making (Nogueira & Jorge, 2015). Allocating capital expenditures based on an accurate information will geerate a more efficient investment decision. One of the indicators of financial management performance can be seen by the efficiency of the local revenue use (Susanto & Djuminah, 2015). The efficiency of the allocation of capital expenditure is represented by the comparison between total amount of investment

issued and the target of local revenue (Chapman & Gorina, 2012).

A local government independence can be described by the value of the local debt and local government capital expenditure allocation. Burga et al. (1991) proved that local government independence can be seen from the interrelation between the local debt and the local capital expenditures. A small PAD will leads to low local government independence, so that the local governments will relies on the transfer of revenue from central government (Bappenas & UNDP, 2007).

2.3. Local-Generated Revenue - PAD

The independence of a region can be determined by the productivity of its local government. The concept of New Public Management (NPM) has pointed out that productivity and efficiency is one of the indicators to assess local government performance (Johansson & Siverbo, 2009). The improvements in the management of local productive assets is a positive effort in in order to enhance the productivity of local resources (Benos & Karagiannis, 2016). Regulation of the Minister of home affairs number 59 of 2007 regulates that the aims of capital expenditure is to fulfill the needs of a region for development and preservation of local fixed assets which have economic value for more than a year. The success of capital expenditure can be measured by the level of economic development of the region (Tuna et al. 2015). The relationship between the capital expenditure and the economic growth of a region is showed by the preservation and development of local productive assets (Tuasikal, 2008). The maintenance and development of the productive asset in the local area aim to increase local-generated revenue (Pendapatan Asli Daerah-PAD) (Harianto & Adi, 2007).

The increase in government revenue is one of the measurements of the economic growth in a country (Roşoiu, 2015). In order to achieve an economic growth in the regions, local government needs to set a target of PAD in each fiscal year

(Moldovan & Macarie, 2015). The tax paid by people in the area has a correlation with tax revenues of local self- government (Sipos, 2015). Data from the reports of budget realization of Regency/Municipal in Indonesia show that the majority of PAD is derived from taxes and levies. The income indicates that capital expenditure investment is affecting the local taxes and retributions. The income indicates that capital expenditure investment affects taxes and retributions. The larger the investment on capital expenditure in the local government means a larger contribution of retributions and taxes received by the local government.

The observation on the data of budget realization report of the Regency/Municipal in Indonesia shows that the contribution of PAD on total revenue is relatively small. The low PAD indicates low investment on capital expenditure, thus the income flow from retribution and taxes are not optimal. Local government has the right and obligation to manage local government business in their jurisdiction (Yunus et al., 2014). The management of the business can be performed by increasing the value of capital expenditure in an effort to increase the PAD. Bin & Quan (2012) suggested that the improvement in the quality of investment management of local government expenditure can improve the quality and productivity service. Based on these explanations, researcher suspect that PAD has positive effect on the amount of capital expenditure allocation in the local government in Indonesia (H1).

2.4. Fiscal Decentralization

The economic growth of a region can be presented by the region's ability in obtaining capital in order to meet their needs (Ciccone & Papaioannou, 2009). The Republic of Indonesia law no. 33 of 2004 regulates that the central government's fiscal decentralization policy aims to fulfill local government budget needs. One of the purposes of central government expenditure for regional spending is to reach a long-term fiscal balance (Lewis & Oosterman, 2009). Baskaran

(2010) proves that central government's fiscal decentralization policy in a significant amount will reduce local government's debt. Both of the studies illustrate that fiscal decentralization is not only aim to fulfill local government budget needs but also intended to fund local government's debt payment.

Transfer of funds from the central government to the local governments is the fundament of local government funding in achieving the principle of financial fairness in a country (Dash & Raja, 2013). The data of local government financial statement in Indonesia show that the revenue transfer that dominates the financing of local budget is DAU and DAK. The policy on DAU aims to anticipate the gap of income among local governments and DAK aims to finance the special programs which become national priority (Wandira, 2013). This study will examine whether the policy of fiscal decentralization affects the amount of capital expenditure allocated by local government.

The concept of fiscal decentralization in this study is presented by DAU, DAK, and local government fiscal dependency ratio. The exact explanation can be described as follows:

a. General Allocation Fund - DAU

DAU aims to evenly distributing the local government capabilities in order to fund their needs as a form of decentralization implemented by central government (Law No.33/2004). Holtz-Eakin et al. (1994) explain that there is a strong relation between Central Government transfer and local government expenditure. The opinion indicates that capital expenditure is a part of APBD funded by DAU. DAU is referred as operational funds used for maintaining local government (Wilson et al., 2010). Based on these considerations, researcher suspect that DAU is a source for local government funding that influence the amount of capital expenditure allocation in the local governments in Indonesia **(H2)**.

b. Specific Allocation Fund - DAK

DAK is a manifestation of the fiscal decentralization policy in Indonesia which aimed

to fund specific activities of local government that are considered as national priorities (Law No. 33/2004). DAK is often used to maintain local government assets in the form of physical buildings and special program specified by a country (Wilson et al., 2010). Nuarisa (2013) states that there is a correlation between capital expenditure and national priority programs such as education programs, health, public services, and environment preservation. Empirically, Wandira (2013) proves that DAK has a significant effect on capital expenditure in all provinces of Indonesia. Based on these considerations, researcher suspect that DAK is a local government funding for special programs (national priority) that affects the amount of capital expenditure allocation in the local government in Indonesia **(H3)**.

c. Fiscal Dependency

The level of local independence can be showed by the effort of the local government obtaining the fund for their budget. The independence of local government in China and United States is showed by the relation between the increase of expenditure and the interest rate for local debt (Du, 2015). The research indicates that the increase of local debt has an effect on the increase of local productivity. The observation on the local budgetary management in Indonesia shows a different tendency. The independence of local government in Indonesia can't be attained because of the revenue transfer from central government still dominates the local revenue (Ihori & Itaya, 2004).

Local revenue is the key factors in the success of local budgeting. The ambition of local government to reach the budget targets should be counterbalanced with the local revenue gain (Tuna et al., 2015). The attainment of local government budget targets toward the revenue acquisition is determined by rational budget management (Velazquez et al., 2010). Rationality in capital expenditure management can be represented with the reduction of income dependency level from the central government (Gemmell et al., 2013).

Fiscal dependency can makes local governments find difficulties in developing their economic growth. Under this condition national issues faced by central government may affects local government budgeting process (Oprea & Bilan, 2015). Local government fiscal dependency can be measured by calculating the ratio of fiscal dependency (KF). The parameter used in the calculation is a comparison of total income from transfer (IT) and total local government revenue (TR) (Mahmudi, 2016: 140). The calculation of the fiscal dependency ratio can be performed using following equation:

$$KF = \frac{IT}{TR} \quad (1)$$

The level of fiscal dependency is an indicator of local government capability in generating their revenue. The excessive fiscal dependency is associated with wasteful expenditure. Grazhevsk & Virchenko (2014) prove that the factor which dominates the failure of fiscal decentralization policy in a country is the inefficiency in local government spending. The excessive fiscal dependency in local government in Indonesia is proved to reduce local government independence in generating their income (Siddiquee et al., 2012). Based on these considerations, researcher suspect that the higher the level of local government financial dependency, the higher the total fund allocated to capital expenditure, although the

amount of funds allocated to capital expenditure does not guarantee the efficiency in its usage (H4).

2.5. Territorial Coverage

The allocation of capital expenditure is based on local government needs for facilities and infrastructure, both for the smooth implementation of governmental duties and for public facilities. One of the variables that reflects the needs for the provision of facilities and infrastructure is LW (Law No.33/2004). Regions with a relatively wide territory will need more facilities and infrastructures to fulfil the requirements of proper public service. An area with wide rural areas will need to allocates more budget for developing facilities and infrastructures for public facilities (Escobal et al., 2015).

LW is one of determining factors in the allocation of regional needs. Yeung (2009) explains that the LW of local government is a factor that determines the amount of revenue transfer from central government. The study shows that the revenue transfers from central government to the local government is strongly influenced by local government LW. Attolico (2014) proves that an extensive scope of territory needs more expansion and maintenance cost for local government fixed assets. Based on these two studies, researcher suspect that local government coverage in Indonesia is indicated by territorial coverage, affects the amount of the capital expenditure allocated in APBD (H5).

2.6. Summary of Conceptual Framework

The summary of conceptual framework is shown in the following Table 1.:

Table 1. Summary of Conceptual Framework

No	The Aspect Analysis	Indicators	The Relationship
1	Productivity	PAD	Capital expenditure is aimed to increase local government productivity which represented by the growth of productive fixed assets owned by a local government. The growth in productive fixed assets aims to increase the PAD. Acquisition of PAD is a manifestation of assets management quality funded by capital expenditures.

No	The Aspect Analysis	Indicators	The Relationship
2	Funding	DAU	DAU is a representation of central government's efforts to resolve the income gap among local government. DAU is one of local government income to meet the needs of local expenditure, including capital expenditure. The increase of DAU will have an impact on the optimization of capital expenditure.
		DAK	DAK aims to fund local government special programs such as the national priority program. The implementation of special program (national priority) needs an allocation of capital expenditure to construct tangible fixed assets in the field of education, health, and environment preservation. An increase of DAK will result in the increase of capital expenditure allocation.
		Dependence Ratio	A high level of fiscal dependency indicating an inefficiency of expenditure management in a local government. The higher the fiscal dependency of the local government will cause an increase in the value of capital expenditure, even without regarding the element of efficiency.
3	Budgetary Needs	Territorial Coverage	A wide are coverage indicating a need of a large expenditure as well. A wide region requires a large capital expenditure to fund the expansion and maintenance of their productive assets. Local governments with a wider LW have a relatively large allocation of capital expenditure.

3. Research Method

3.1. The Population and Sampling Technique

The population in this research is all local government of Regency/Municipal in Indonesia who published audited financial statements in the year of 2009-2013. The data used in this research are secondary data in the form of local government profile and financial statement of local government in Regency/Municipal level. The sample is taken using purposive sampling method; a sampling method performed by selecting research data that provide information needed in analysis process and hypothesis testing (Ghozali, 2011). Samples were selected based on the validity of the data and information obtained at each regency / municipal in Indonesia. This means, this study took a sample that has valid data and information

The data are collected from the official website of General Directorate of Financial Balance (<http://djpk.depkeu.go.id>), Audit Board of The Republic of Indonesia (<http://bpk.go.id/>), Ministry of Internal Affairs (<http://kemendagri.go.id/>) (<http://otda.kemendagri.go.id/>), Central Bureau of Statistics (<http://bps.go.id>), and

National Development and Planning Agency (<http://bappenas.go.id>).

3.2. The Data Analysis Method

The method used in analyzing the data is panel data regression analysis (fixed effect). Panel data regression worked out by merging cross-section and time series data, thus it can achieve a comprehensive testing from the over time variable (Widarjono, 2007). The regression model in this research is as follows:

$$(BM = \alpha + \beta_1 PAD + \beta_2 DAU + \beta_3 DAK + \beta_4 KF + \beta_5 LW + \beta_6 TPD + \beta_7 LD + \beta_8 Tenure + \epsilon_i) \quad (2)$$

Notes:

BM : Capital Expenditure

PAD : Local-Generated Revenue

DAU : General Allocation Fund

DAK : Specific Allocation Fund

KF : Fiscal Dependency

LW : Territorial Coverage

TPD : Type of Local Government - Regency or Municipal (Control Variable)

LD : The Location Area – Java or Non Java (Control Variable)

Tenure : A Status Area – main region or new autonomous (Control Variable)

The hypothesis in this research is tested using simultaneous parameter regression test (F test), partial parameter regression test (t-test), and the coefficient of determination test (R²)

5. Data Analysis and Discussion

5.1. The Description of Research Object

The objects of this research are the LW from the local government profile, APBD from 2009-2013, and the audited local government financial report of Regency/Municipal in 2009-2013. The result of sampling using purposive sampling method can be seen in Table 2. below.

Table 2. Sampling Procedure

Description	Amount
The number of observation using the data of local government profile, APBD, and local government financial report in Regency/Municipal level in Indonesia for the period of 2009-2013	2.460
The number of incomplete data related to local government profile and the recapitulation of audited financial statement for Regency/Municipal government in 2009-2013	570
The number of observations used in this research	1890

3.3 The Data Analysis and Hypothesis Testing

a. Descriptive Statistic Test Result

The result of descriptive statistic test indicates that the average local government capital expenditure is 178.724,25 (in million rupiahs). The minimum value of capital expenditure is in the municipal Government of Serang in the budget year of 2009, 19.316,73 (in million rupiahs). Meanwhile, the maximum capital expenditure is in the municipal Government of Banjarmasin in the budget year of 2012 in the amount of 2.499.133,16 (in million rupiahs). The average PAD is 83.913,20 (in million

rupiahs). The average PAD value indicates that the level of Regency/Municipal productivity is relatively low if compared with the funding from central government. DAU had an average value of 360.646,97 (in million rupiah). A third independent variable; DAK, has an average value of 51.443,84 (in million rupiahs). The average value of fiscal dependency ratio (KF) is 0,8707 or 87,07% indicating that the high Regency/Municipal government level of dependency towards central government. The average of local government LW is 3.666 Km.

b. Pooled Data Regression Analysis

The analysis model used in this study is pooled data regression - *cross section fixed effect*. This model is based on two (2) testing phase. The first phase, researchers conducted chow test to see the exact model among the models *common effect* or *fixed effect*. The results show that the chi-square value of 0.000 is less than 0.05, so that the *fixed effect model* is more appropriate to use. The second phase, testing is done by using the *Hausman test* to ensure the most suitable model between the *fixed effect* model with *cross section random effect* model of. The test results show that the probability of 0.000 smaller than alpha 0.05. This means that the test results supporting at an earlier phase that is most appropriate *fixed effect* model used in the analysis of data. In the end, the method of data analysis used in this study is panel data regression methods - *fixed effect* (test results attached).

c. Simultaneous Parameter Significance Test (Statistic F test)

Result of testing the simultaneous parameter significance (F) indicates that the value of F significance is 0,000. The value based on the test result that simultaneously all independent variables have significant influence on capital expenditure variable. This test indicates that regression model used can explain capital expenditure behavior in APBD. Table 3. is the result of F significancy test in this research:

Table 3. The Result of Simultaneous Hypothesis Test

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16452843501106,422	12	1371070291758,868	78,968	0,000 ^b
Residual	32589012168560,650	1877	17362286717,400		
Total	49041855669667,070	1889			

a. Dependent Variable: BM

b. Predictors: (Constant), PAD, DAU, DAK, KF, LW, TPD, LD, Tenure

Source: Processed secondary data

d. The Partial Parameter Significance Test (t-statistic test)

The test result of parameter significance-t test is presented in Tabel 4.

**Tabel 4. The Result of Partial Coefficient Hypothesis Test
(Panel Data Regression - Fixed Effect)**

Variable	Coefficients		t	Prob.
	C	Std. Error		
(Constant)	364.390,042	28.242,664	12,902	0,000
PAD	0,298	0,020	14,685	0,000*
DAU	-0,017	0,026	-0,650	0,516
DAK	0,498	0,165	3,021	0,003**
KF	-323232,420	28560,666	-11,317	0,000*
LW	8,681	0,651	13,334	0,000*
TPD	4936,340	8842,678	0,558	0,577
LD	8451,733	8996,148	0,939	0,348
Tenure	15524,657	7182,334	2,162	0,031**

Description:

*Sig 1%, **Sig 5%

PAD: Locally generated revenue, DAU: General allocation fund, DAK: Special allocation fund, KF: Fiscal dependency, LW: territorial coverage, TPD: The type of local government, LD: local government location, Tenure : A status area.

Source: Processed secondary data

Tabel 4. shows that PAD, DAK, fiscal dependency (KF), territorial coverage (LW), and a status area (Tenure) have significant effect on the allocation of capital expenditure (BM). The discussion of analysis result can be outlined as follows:

a) The analysis on regional productivity aspect shows that PAD has significant positive effect on capital expenditure. Thus, the acquisition of PAD is connected with the

development of productive fixed asset in the local governments in Indonesia. The researcher prove that capital expenditure investment provide a contribution towards the acquisition of PAD, even if its contribution is relatively low compared with the funds needed by local government cover their expenditure. The relatively small value of PAD shows that the management of capital expenditure still needs to be improved in

order to gain optimal PAD (Bappenas and UNDP, 2007). One of the efforts that can be taken to increase PAD is increasing the innovation in the development of local government productive asset through capital expenditures.

- b) The analysis on local government funding aspect shows that DAU variable has no effect on capital expenditure variable, whereas DAK variable has positive significant effect on BM variable. The result obtained indicates that capital expenditure tends to be utilized for funding regional programs (national priorities). Meanwhile, fiscal dependency variable has negative significant effect on capital expenditure variable. The test results shows different result with the initial research hypothesis (H5). This contradiction shows that the manifestation of the efficiency in managing local government capital expenditure is the increase of regional fiscal dependency ratio.
- c) The LW factor is a determinant in determining the need of capital expenditure. The result of the testing shows that territorial coverage variable has positive significant effect on capital expenditure variable. This result gives an idea that a local government with relatively wide LW allocates more funds for capital expenditure.
- d) The analysis of regional characteristic differences perspective can be shown in the test on this research control variable. The test result shows that Tenure variable has an influence on the allocation of fund for local government capital expenditure.

Thus, there are differences of policy between the new autonomous region and main region in allocating capital expenditure. The observation performed on the value of capital expenditure in Regency/Municipal financial report data shows that the value of capital expenditure allocation in the new autonomous region tend to be higher than the main region. However, the significance value of control variable TPD and LD are above the predetermined significance value (5%). The test result shows that the type of local government region (Regency/Municipal) and local government location (Java/outside java) have no effect towards regional capital expenditure.

The testing results pose a change toward regression equation model formulated earlier. The regression equation based on the testing results can be formulated as follows:

$$(BM = 364390 + 0,298 \text{ PAD} + 0,498 \text{ DAK} - 323232 \text{ KF} + 8,681 \text{ LW} + 15524 \text{ Tenure}) \quad (3)$$

- e. The Test of the Coefficient of Determination
The result of coefficient of determination testing can be shown by Adjusted R² value of 0.331 or 33.1 %. The result is a measure that shows that independent variables affect the dependent variable for 33.1 %. However, there are another independent variables outside the research model that affect the dependent variable for 66.9 %. Here is the result of coefficient of determination test:

Table 5. The test result of coefficient of determination

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,579 ^a	0,335	0,331	131766,03021	1,691

a. Predictors: (Constant), PAD, DAU, DAK, KF, LW, TPD, LD, Tenure

b. Dependent Variable: BM

Source: Processed secondary data

4. Conclusion and Implication

4.1. Conclusion

This research aims to analyze the factors that affects the determination of fund allocated to capital expenditure in local government. The analysis are performed by considering regional productivity aspect, regional funding aspect, and regional budget needs aspect. The result of analysis on productivity aspects shows the connection between PAD and local government capital expenditure. PAD is a measurement of local government productivity that is affected by the innovation of local government in developing productive assets. The improvement in innovation of local government productive asset development leads to the increase of fund allocated for capital expenditure.

An analysis on regional funding aspect shows the connection between DAK and regional fiscal dependency, and local government capital expenditure. The analysis result obtained from testing the fiscal dependency factor and funding factor (DAK) shows that the fiscal dependency of local government to fund their capital expenditure caused by the efficiency in deciding the value of capital expenditure funded by DAK. The efficient funding of capital expenditure results in the small return received by the local government.

The aspect of central government funding (transfer revenue) is the largest contributor in funding local government expenditure. However, we found no evidence on the influence of DAU on the allocation of capital expenditure in Regency/ Municipal government in Indonesia. The test results obtained show that the DAU variable has no effect on capital expenditure variable. DAU tends to be used for local government activities besides infrastructure development, in the other word more for routine expenditure (DJPK, 2013).

The analysis on the aspect of local government regional budget needs shows the

connectedness between local government LW and the totalvalue of local government capital expenditure. One of the factors that determine local government needs of capital expenditure is the local government LW. However, the testing on control variable shows the difference between the value of capital expenditure allocation in a new autonomous region with the main region. The new autonomous area tends to need more capital expenditure than the main region.

In the end, conclusion can be drawn based on the result of analysis performed. This research concludes that several factors affect the determination of the value of local government capital expenditure allocation in Indonesia, the variables are: the level of local government productivity indicates by PAD, regional funding for special programs (national priorities) indicates by DAK, the efficiency in managing capital expenditure, the area coverage of local government, and the regional characteristic difference proxied by the difference of regional establishment status (main region/the new autonomous area).

4.2. Implications

This research try to learn the process of regional capital expenditure management. The analysis result gives an overview of the process of regional capital expenditure allocation that consider regional productivity factor, the efficiency of funding, territorial, and the status of a regional establishment. This research is expected to provide a reference for future research. This research can become learning material for local government in order to increase the benefit of capital expenditure.

5. Note

This research uses data from valid and relevant sources. Following is the metadata explanation for this research:

Metadata

No	Data Type	Operational Definition	Data Source	Data Result
1	Capital Expenditure (BM)	Log 10 of the capital expenditure fund allocation in the Regency/Municipal government in the year of 2009 - 2013.	The recapitulation of budget realization report (laporan Realisasi Anggaran -LRA) of Regency/ Municipal in Indonesia in the year of (2009 - 2013)	The website Direktorat Jenderal Perimbangan Keuangan Republik Indonesia http://www.djpk.depkeu.go.id/?page_id=316
2	Locally generated revenue (PAD)	Log 10 of locally generated revenue.		
3	General allocation fund (DAU)	Log 10 of general allocation fund.		
4	Special allocation fund (DAK)	Log 10 of Special allocation fund.		
5	Fiscal dependency (KF)	Fiscal dependency ratio	The fiscal dependency ratio is calculated by dividing the local government transferred income (IT) and total local government revenue (TR) . $KF = IT / TR$	The website Direktorat Jenderal Perimbangan Keuangan Republik Indonesia http://www.djpk.depkeu.go.id/?page_id=316
6	Territorial coverage (LW)	The territorial coverage of a local government	The quantity of numbers that indicate size of territory	The central bureau of statistics page per Regency/Municipal
7	The type of local goverment (TP)	The type of local government in Indonesia	Dummy variable that are measured with 0 for Regency and 1 for Municipal	The selection data based on the autonomous region http://otda.kemendagri.go.id/images/file/data_dan_informasi/seputar_otda/total_daerah_otonom.pdf
8	Local government location	The location of local government categorized by Java/outside java.	Dummy variable that are measured with 0 for outside java and 1 for java	
9	Local government Status	The main region category (DI)/ the new autonomous area (DOB).	Dummy variable that are measured with 0 for DI and 1 for DOB	

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7. Appendix

Appendix 1. The Result of Chow Test

Redundant Fixed Effects Tests

Equation: FE

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.054921	(377,1502)	0.0000
Cross-section Chi-square	1074.572844	377	0.0000

Cross-section fixed effects test equation:

Dependent Variable: BM

Method: Panel Least Squares

Date: 11/29/16 Time: 08:11

Sample: 2009 2013

Periods included: 5

Cross-sections included: 378

Total panel (unbalanced) observations: 1890

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	382566.8	27530.73	13.89599	0.0000
PAD	0.316998	0.020058	15.80418	0.0000
DAU	-0.028472	0.015023	-1.895213	0.0582
DAK	0.717031	0.143892	4.983101	0.0000
KF	-340455.8	28947.50	-11.76115	0.0000
LW	8.588114	0.659757	13.01708	0.0000
TPD	5839.287	9006.081	0.648372	0.5168
LD	3977.993	8675.572	0.458528	0.6466
Tenure	17094.30	7236.749	2.362152	0.0183
R-squared	0.309751	Mean dependent var		178514.4
Adjusted R-squared	0.306813	S.D. dependent var		161097.0
S.E. of regression	134126.0	Akaike info criterion		26.45570
Sum squared resid	3.38E+13	Schwarz criterion		26.48213
Log likelihood	-24965.18	Hannan-Quinn criter.		26.46543
F-statistic	105.4009	Durbin-Watson stat		1.376995
Prob(F-statistic)	0.000000			

Appendix 2. The result of Hausman test

Correlated Random Effects - Hausman Test

Equation: HAUSMAN

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	76.501032	8	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
PAD	0.277183	0.298010	0.000081	0.0204
DAU	-0.027956	-0.031743	0.000596	0.8768
DAK	0.545370	0.679181	0.010754	0.1969
KF	-266216.121604	-293615.203600	70180694.328819	0.0011
LW	4.513330	6.803516	0.176539	0.0000
TPD	-18830.451228	-3355.231287	21549192.058977	0.0009
LD	154649.606159	8258.894517	1617415647.534469	0.0003
Tenure	-572.821286	9038.437754	10213287.663338	0.0026