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## **Article**

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# **Provided in Cooperation with:**

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Reference: Muda, Iskandar/Ridha, Hasnaini (2018). Effect of revenue and general allocation fund of capital expenditures in the economic growth as moderator variable: case of Indonesia. In: Academic journal of economic studies 4 (1), S. 29 - 39.

This Version is available at: http://hdl.handle.net/11159/1861

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# Effect of Revenue and General Allocation Fund of Capital Expenditures in the Economic Growth as Moderator Variable. Case of Indonesia

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Abstract This study aims to determine the factors that influence the allocation of the capital expenditure in the District / City of North Sumatra and Aceh. This study has a sample of 36 districts /cities in North Sumatra and Aceh from 2012-2015. Sample selection is done by purposive sampling method. The data used in this research is secondary data, reports on realization of the Budget Revenue and Expenditure published through the website www.depkeu.djpk.go.id and www.sumut.bps.go.id. The analysis model used is multiple linear regressions with Ordinary Least Square method is carried out with the aid of a computer program EViews version 7.0. The results of this study indicate that all independent variables, namely the Local Revenue and the General Allocation Fund simultaneously significant effect on Capital Expenditure. Partially General Allocation Fund positive and significant impact on Capital Expenditure but local revenue was not positive and significant impact on Capital Expenditure. Economic growth is not fully able to moderate (strengthen / weaken) the relationship between the Local Revenue and the General Allocation Fund to the Capital Expenditure Government of Regency/City in the province of North Sumatra and Aceh province in 2012-2015.

Key words

Capital expenditure, local Revenues, general allocation funds and economic growth

JEL Codes: G18, G28, G38, H50, H72, H76

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# 1. Introduction

National Development is an effort implemented by all components of the nation in order to achieve the goals of the state. among others, to create prosperity community. One way to ensure the benefits of development are acceptable to all parties is through efforts to empower the potential of regional human resources local, through regional autonomy. One of the manifestations of the implementation of regional autonomy is the implementation of decentralization, where to the assigned areas of affairs, duties and authority to organize and manage own government affairs and interests of the local community by staying guided on legislation. Through decentralization is expected the ability of the government areas for development management to be more agile, accurate, and precise. Affairs government which is submitted or distributed to the area is accompanied also by transfer or financial transfers manifested in financial relations between the center and area. One form of central and regional financial relation is the Special Allocation Fund (DAK), whereby funds sourced from APBN revenues are allocated/transferred to area to finance special activities which are regional affairs and constitute national priorities, so as to help reduce the cost burden of special activities must be borne by the local government. In accordance with the basic law of the Republic of Indonesia Year 1945, the local government authority to control and manage their own affairs according to the principle of autonomy and duty of assistance. Granting broad autonomy to the regions directed to accelerate the realization of public welfare by improving services, empowerment and community participation (Rasdianto et al., 2014). In addition, through the broad autonomy, the region is expected to improve competitiveness with due regard to the principles of democracy, equality, justice, privilege and specificity and the potential and diversity of the regions in the system of the Unitary Republic of Indonesia. Implementation of regional autonomy of local government provides the opportunity to further develop the potential of the area, the authority to manage the resources of the region efficiently and effectively, and improve financial performance area. This policy is a challenge and an opportunity for local governments to take care of the household and their own areas. As well as the central government, regional financial arrangements at the local government level are also regulated by dividing it into a general arrangement and special arrangements. Included in the general arrangement is the budget. While inventory and capital of a region separated as a special arrangement. Both are an important element in the financial area.

According to Law No. 32 of 2004, local revenue is a source of local government revenue derived from the region itself based capabilities. PAD consists of local taxes, levies; results separated areas of wealth management and other legitimate income. PAD is the main source of revenue for an area. PAD aims to provide flexibility to the regions in optimizing the potential of regional funding itself in the implementation of regional autonomy as the realization of the principle of decentralization. The increase in revenue is expected to encourage an increase in capital expenditure areas so that local governments are able to provide good quality public services. High economic growth encouraged local governments to conduct regional development are realized in the form of provision of facilities, infrastructure and infrastructure devoted to the public interest. Andaiyani (2013) states that the area needs for facilities and infrastructure, both for the smooth implementation of the tasks for the government and public facilities affects the magnitude of their spending.

The problem faced by local governments in public sector organizations is the budget allocation. The allocation of the budget is the amount of funds allocated to each local government programs. With limited resources, local governments should be able to allocate the revenues received for the shopping area that is productive. Shopping areas are approximate expenditure burden the area allocated in a fair and equitable so that the relative can be enjoyed by all communities without discrimination, particularly in the provision of public services (Kawedar *et al.*, 2008). Shopping areas are grouped into two types, namely indirect expenditures and direct spending. Indirect expenditures include personnel expenses, interest expenditure, subsidies, grants expenditure, social assistance spending, spending for the results to the provincial /district and village administrations, unexpected expenditures (Nurzaimah *et al.*, 2016). While the direct expenditure covers personnel expenditures, spending on goods and services, Capital expenditures (Central Bureau of Statistics, 2010).

During this time the allocation of local budget is more widely used for routine expenditure considered less productive so that people do not feel the direct allocation of shopping areas. Utilization of spending should be allocated for productive things that spur economic movements and improve public services such as building, infrastructure, equipment and other fixed assets. If this is done, the level of public confidence in the local government will be increased as well as regional development goes according to local government programs. Of phenomena, namely the imbalance of financial structure and capital expenditure are yet to be implemented for the growth of public welfare, because a larger local government allocate resources to finance recurrent expenditure acceptance relatively consumptive. Management of regional spending, especially capital spending has not fully oriented public sector, one of which is caused by the expenditure management and allocation geared to the interests of certain groups. See previous studies conducted by Malau (2013) which examines the "Influence of Regional Income and General Allocation Fund and Special Allocation Fund to the Economic Growth with Capital expenditures as variables moderating, research results stated that the PAD, DAU and DAK simultaneously affect significant to the Economic Growth and Capital Expenditure variable is not moderating variables. Research by Sugiarti and Supadmi (2014), which examines the "Influence of PAD, DAU and the remaining budget on Capital Expenditure to Economic Growth as a variable Moderation", the study suggests that the PAD, DAU and Silpa positive significant effect on Shopping capital and Economic Growth able to moderate PAD and DAU variable, but are not able to moderate the variable SILPA on capital spending.

# 2. Literature review

#### 2.1. Fund balance

The financial balance between the Central Government and the Regional Government is a fair, proportional, democratic, transparent and efficient system of financing in the context of funding the implementation of decentralization, taking into account the potential, conditions and needs of the region, and the amount of funding for the implementation of Deconcentration and Co-Administration Tasks. Fiscal Balance between the Government and the Regional Government is an integral part of the State Finance system, and is intended to regulate the funding system of central government authority submitted, delegated and assigned to the Region (Yahya *et al.*, 2017). Balancing Funds are funds sourced from APBN revenues allocated to the Region to fund the needs of the Region in the context of implementing Decentralization. Balancing Funds in addition to being intended to assist the Region in funding its authority, also aims to reduce the inequality of government funding sources between the Central and Regional Governments and to reduce the interregional government funding gap (Muda *et al.*, 2015). The funding embraces the principle of money follows function, which implies that funding follows the governmental functions that are the responsibility and responsibility of each level of government. Balancing Fund is a Regional funding sourced from APBN consisting of DBH, General Allocation Fund (DAU), and Special Allocation Fund (DAK). These three components of the Balancing Fund are a fund transfer system from the central Government and are a unified whole.

# 2.2. Profit Sharing Fund (DBH)

DBH is a fund sourced from APBN that is distributed to the regions based on certain percentage figures with due attention to the potential of producing regions. Basically, besides intended to create equal distribution of regional income, DBH also aims to provide justice for the region over its potential. In this case, although income from state taxes and revenues related to natural resources (SDA) is the authority of the central government to collect it, but as a producing region, local

### Vol. 4 (1), pp. 29-39, © 2018 AJES

governments are also entitled to get a share of revenue from the potential of the region. Revenue Sharing Funds sourced from state taxes, including:

- (a) Land and Building Tax (PBB);
- (b) Acquisition of Land and Building Rights (BPHTB); and
- (c) Income Tax (PPh) Article 25 and Article 29 Individual Individual Taxpayer and Income Tax Article 21.

While Revenue Sharing Fund that comes from natural resources, including:

- (a) the Forestry Sector;
- (b) the general Mining Sector;
- (c) Fisheries Sector;
- (d) Petroleum Mining Sector;
- (e) Natural gas mining sector; and
- (f) The geothermal mining sector.

The large proportion of revenue-sharing funds between the central government and local governments depends on the type of income. Similarly, between provincial and district / municipality governments the proportion is uneven for every type of income. Sometimes the Central Government gets a larger proportion of revenue share than the Local Government, such as: Income derived from Income Tax (PPh), but the Central Government may also receive a smaller proportion than the proportion of revenue share to the Regional Government, such as: Revenue sourced from Land and Building Tax Receipts (PBB). The division of this proportion depends on the involvement of the Regional Government in collecting and impacting on the local community.

# 2.3. General Allocation Fund (DAU)

The General Allocation Fund (DAU) is a fund sourced from APBN that aims at equal distribution of financial capacity among regions or reduces the inequality of inter-regional financial capability through the application of certain formulas. DAU of an area is determined by the basic allocation and the size of the fiscal gap of an area. The basic allocation is calculated based on the amount of salaries of local civil servants (regional civil servants) in the area concerned. While the fiscal gap is the difference between the needs of the region (fiscal need) and the potential area (fiscal capacity). Regional needs are the need for regional financing to perform basic public service functions reflected in the size of the region, geographic state, population, level of health and welfare of the people in the regions, and the level of income of local communities. While the fiscal capacity is reflected from the Original Revenue (Muda *et al.*, 2015), Tax Sharing Funds, and Natural Resources.

DAU allocations for regions with large fiscal potential but small fiscal needs will earn relatively small DAU allocations. In contrast, regions with little fiscal potential, but their large fiscal needs will obtain relatively large DAU allocations, which implicitly, the principle confirms the functioning of DAU as a factor of equalization of fiscal capacity. Similarly, when compared to the basic allocation, an area with a fiscal gap equal to zero receives DAU of the basic allocation. Areas that have a negative fiscal value and negative value less than the basic allocation receive DAU amounting to basic allocation after deducting the fiscal gap value. Whereas areas with negative fiscal gap and negative values are equal to or greater than the basic allocations do not receive DAU. The central government is tasked with formulating the formula and calculating DAU based on data to calculate fiscal needs and fiscal capacity obtained from BPS and/or government agencies authorized to issue reliable data. Meanwhile, the total amount of DAU is set at least 26% (twenty six percent) of Net Domestic Revenue specified in the APBN.

# 2.4. Special Allocation Fund (DAK)

The Special Allocation Fund (Dana Alokasi Khusus, DAK) is a fund sourced from APBN that is intended to help finance special activities in certain areas which are regional affairs and in accordance with national priorities, in particular to finance the needs of basic public service facilities and infrastructure that have not reached a certain standard or to encourage the acceleration of regional development. The central government sets DAK criteria covering general criteria, specific criteria, and technical criteria. General criteria are set by considering the ability of Regional Finance in APBD. Specific criteria are established by observing the laws and characteristics of the Region. While the technical criteria set by the technical ministry program /activity implementer. In contrast to DBH and DAU receiving areas, DAK receiving areas are required to provide a Companion Fund of at least 10% (ten percent) of the DAK allocation. The companion funds should be budgeted in the

APBD at the same time as the DAK budgeted in APBN. However, for regions with certain fiscal capabilities or areas where the difference between APBD and APBD is equal to 0 (zero) or negative, it is not compulsory to provide such a Fund.

### 2.5. Miscellaneous Revenues

Other groups of legitimate local revenue divided by type of income may include: Grants derived from the government, other regional governments, domestic private entities/institutions/organizations, non-binding private groups/individuals, and foreign institutions; Emergency Funds from the central government in national disasters and/or extraordinary events that cannot be addressed by regions using APBD sources. Adjustment funds and special autonomy funds set by the government; Provision of tax revenue sharing from province to regency/city; Financial assistance from the province or from other local governments. Regional revenue components that include Local Own Revenues (PAD), Balancing Funds, and Other Legal Revenues, each year must be budgeted and included in the APBD of each Local Government together with the regional budget and expenditure. All funding in the APBD is categorized as a decentralization fund. As with the deconcentration fund and/or co-administration fund. Governmental affairs that are central government affairs and cannot be decentralized include: foreign affairs, defense, security, yustisi, monetary and fiscal affairs as well as religion. In carrying out government affairs the Central Government shall organize itself or may delegate some of the governmental affairs to the central government or the Central Government's representative in the region or may assign to the local government and/or village government. The delegation of government authority by the Central Government to the Governor as representative of the central government and/or to a vertical institution in a particular region is called Deconcentration (Yahya et al., 2017; Tarmizi et al., 2017; Badaruddin et al., 2017). While assignments from the Central Government to local governments and/or villages, from provincial governments to districts/cities and/or villages, and from district/city governments to villages to perform certain tasks are called co-administration tasks. The implementation of the deconcentration and co-administration is funded by the central government or budgeted in the APBN on the relevant ministerial budget post, so that although the implementation of the affairs is delegated or submitted to the local government, the funding of its implementation cannot be budgeted in the APBD. This is what distinguishes decentralization funds with deconcentration funds and co-administration funds. As a consequence of this funding system, if there are more budgetary remnants and/or cash balances from deconcentration and co-administration funds, the remainder and/or cash balance must be deposited back into the State General Treasury account, and if in the case of deconcentration and co-administration duties result in receipt, then such receipt shall constitute APBN revenue and shall be deposited into the State General Treasury Account in accordance with the laws and regulations. Neither does the relation with the goods obtained for the execution of such activities. If the goods obtained from decentralization funds, directly become the property of the region. Goods obtained from deconcentration and co-administration funds are state property. However, there is no possibility of the state property being granted to the Regions, so that if the state-owned goods have been granted to the Region then it shall be administered and administered by the local government, whereas if the state-owned goods are not granted to the Region, shall be managed and administered by the ministry the state/institution providing the transfer of authority or coadministration, even if the goods are located or used by the local government.

# 3. Methodology of research

In gathering research data do technical documentation that the secondary data collection techniques related to the study namely the Regional Budget. The time period for the independent variables and the dependent variable is the period 2010 - 2015. The research data was obtained via the Internet by way of downloading through the Financial Information System site Republic Indonesia www.depkeu.djpk.go.id. Methods of data analysis used in this study are the method of statistical analysis using software Eviews. This study uses econometric analysis tool, which is regressing variables that exist with OLS (Ordinary Least Square) using EViews application assistance. Data analysis techniques used in this research is test descriptive statistical analysis, hypothesis testing consisting of coefficient determination test, partial test (t-test) and a simultaneous test (F-test); and classical assumption test consisting of normality test, multicollinearity, heteroscedasticity test and autocorrelation test. This study is based on research associative. The population of this research is all regencies/cities located in North Sumatra province 33 districts/municipalities and the Province of Aceh by the number of 23 districts/cities. The sample used in this study was taken by using purposive sampling technique. Consideration conducted by researchers in the sample with the following criteria:

- 1. District/City Budgets publish its budget consistently from year 2012 to 2015.
- 2. regencies/cities that are not divided and not division in the period of 2012-2015.

### 4. Results and discussions

# 4.1 Descriptive Statistics Analysis

Based on the analysis of descriptive statistics obtained a description of the sample as follows:

	BM	DAU	PAD	PE
Mean	16041.12	105696.9	46230.34	6.673231
Maximum	1201667.	1528725.	1758788.	30.41037
Minimum	46.74600	225.2570	6.634000	1.072600
Std. Dev.	134169.6	353616.0	263586.3	4.694933
Observations	144	144	144	144

Table 1. Descriptive Statistics of PAD, DAU, BM, and PE

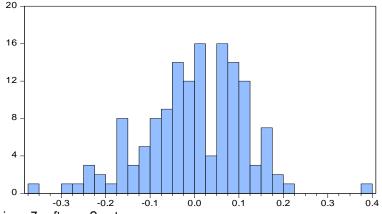
**Source:** Data processed (2017).

Based on Table 1, know the value of BM. The minimum is 46 746 and the value of BM. Maximum 1201667. While the average and standard deviation of BM. is 16041.12 and 134169.6. Unknown PAD minimum value is 6,634 and the maximum value of PAD 1758788. Meanwhile, the average and standard deviation of PAD is 46230.34 and 263586.3. Unknown value is the minimum DAU 225 257 and a maximum value of 1528725. While the average and standard deviation of the DAU is 105696.9 and 353616.0. Unknown value was 1.0726 and the minimum PE maximum value of 30.41037. While the average and standard deviation of the PE is 6.673231 and 4.694933.

# 4.2. Classical Assumption Test

# 4.2.1. Normality Test

In this study, test for normality of the residuals using the Jarque-Bera test (J-B). In this study, the significance level used  $\alpha =$ 0.05. Basis for decision making is look at the numbers of statistical probability J-B, with the following provisions. If the value of the probability  $p \ge 0.05$ , then the normality assumption is met. If the probability of <0.05 (Muda et al., 2014, Dalimunthe et al., 2016; Sirojuzilam et al. 2016; Handoko et al., 2017; Marhayanie et al., 2017; Yahya et al., 2017), then the normality assumption is not met.



Series: Residuals Sample 1 144 Observations 144 Mean 3.23e-16 0.002968 Median Maximum 0.375779 Minimum -0.374219 Std. Dev. 0.113463 Skewness -0.332588 3.678849 Kurtosis Jarque-Bera 5.419768 Probability 0.066545

Source: Eviews 7 software Sports

Figure 1. Normality Test

Note that based on Figure 1, known statistical probability value of A-B is 0.066545. Because the value of the probability p. i.e., 0.66545, is greater than the significance level, namely 0.05. This means that the normality assumption is met.

# 4.2.2. Test Multicollinearity

In this study, multicollinearity can be seen from the correlation between variables contained in the correlation matrix (Ghozali, 2013; Muda and Rafki, 2014; Lubis et al., 2016; Azlina et al., 2017; Sadalia et al., 2017; Nurlina et al., 2017). Muda (2017) states "if between independent variables there is a high correlation, ie above 0.9, then this is an indication of multicolinearity." Multicollinearity test results are presented in Table. 2. Based on Table 2, it can be seen that the correlation between the PAD and DAU 0.59737, 0.265506 between the PAD and PE, and between the DAU and PE 0.192713. Multikolinearitas test results in Table 2 it can be concluded that there are no symptoms of multicollinearity between independent variables. This is because the value of the correlation between the independent variables of not more than 0.9 (Ghozali, 2013: 105).

Table 2. Correlation Matrix Test Multicollinearity

	PAD	DAU	PE
PAD	1.000000	0.597370	0.265506
DAU	0.597370	1.000000	0.192713
PE	0.265506	0.192713	1.000000

Source: Sports Software Eviews 7 (2017).

#### 4.2.3. Test of autocorrelation

Assumptions about the independence of the residual (non-autocorrelation) can be tested using the Durbin-Watson test (Mahdaleta *et al.*, 2015; Suriadi *et al.*, 2015). Statistical value of the Durbin-Watson test ranges between 0 and 4. Nurzaimah *et al.* (2016) states as follows. "Specifically, it (Durbin-Watson) whether adjacent residuals tests are correlated. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated ". Statistical value of the Durbin-Watson test are smaller than 1 or greater than 3 is indicated autocorrelation. Nasir *et al.* (2017) states as follows. "The size of the Durbin-Watson statistic depends upon the number of predictors in the models and the number of observations. For accuracy, you should look up the exact values acceptable in Durbin and Watson's (1951) original paper. As very conservative rule of thumb, values less than 1 or greater than 3 are definitely cause for concern; however, values closer to 2 may still be problematic Depending on your sample and model ".

Table 3. Autocorrelation test the Durbin-Watson Test

Log likelihood	109.5586	Hannan-Quinn criter.	-1.454840
		Durbin-Watson stat	1.226528

Source: Sports Software Eviews 7 (2017).

Based on Table 3, the value of the Durbin-Watson statistic is 1.226528. Note that since the value of the Durbin-Watson statistic lies between 1 and 3, i.e. 1 < 1.22658 < 3, then the assumption of non-autocorrelation met. In other words, no symptoms of high autocorrelation in the residuals.

# 4.2.4. Test Heteroskidastity

Detection of the presence or absence of heteroscedasticity can be done by testing Glejser (Gujarati, 2003; Gio and Elly; 2015, Nurlina *et al.*, 2017). The following test results Glejser.

Table 4. Heteroskedasticity Test

Heteroskedasticity Test: Glejser

Test Equation:

Dependent Variable: ARESID

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.039718	0.042231	-0.940492	0.3486
X1	0.031833	0.019544	1.628815	0.1056
X2	0.024521	0.022772	1.076800	0.2834

Source: Sports Software Eviews 7 (2017).

Based on the test results Glejser in Table 4, note:

- Value Prob. PAD of Glejser test is 0.1056> 0.05, then there is no heteroscedasticity.
- Value Prob. DAU from Glejser test is 0.2834> 0.05, then there is no heteroscedasticity.

# 4.3. Hypothesis Testing

In hypothesis testing, analysis will be done coefficient of determination, the effect of simultaneous testing (test F), and testing the effect of partial (t test). The values of the statistical coefficient of determination, F test and t test is presented in Table 5.

Table 5. Value statistics of the coefficient of determination, F test and t test

Dependent Variable: Y Method: Least Squares Date: 02/28/17 Time: 08:18

Sample: 1 144

Included observations: 144

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1 X2 C	0.056514 0.125144 1.811440	0.032612 0.037999 0.070471	1.732890 3.293347 25.70484	0.0853 0.0013 0.0000
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.236194 0.225360 0.114265 1.840963 109.5586 21.80088 0.000000	Mean dependent var S.D. dependent var Akaike info criterion Schwarz criterion Hannan-Quinn criter. Durbin-Watson stat		2.249945 0.129826 -1.479981 -1.418110 -1.454840 1.226528

Source: Sports Software Eviews 7 (2017).

### 4.3.1 Analysis of Coefficient of Determination

Based on Table 5, note the value of the coefficient of determination (R-squared) equal to R ^ 2 = 0.2361. This value can be defined PAD and DAU able to influence/explain BM simultaneously or together amounted to 23.61%, while the remaining 76.39% influenced by other factors.

# 4.3.2 Simultaneous Effect Significance test (test F)

F test aims to test the effect of independent variables together or simultaneously to the dependent variable. Based on Table 5, note the value of Prob. (F-statistics), i.e. 0.000 <0.05 (Dalimunthe *et al.*, 2016; Nurzaimah *et al.*, 2016 and Marhayanie *et al.*, 2017)), it can be concluded that all independent variables, namely PAD and DAU, simultaneously, have a significant effect on the variable BM.

### 4.3.3 Regression Equations and Significance Effect of Partial (t test)

Based on Table 5, obtained the following regression equation.

Y = 1.811 + 0.0565X + 1 + 0.125X + 2 + e

Based on Table 5, note:

The regression coefficient of PAD is 0.0565, which is positive. This value can be interpreted PAD positive effect on BM. 1. Know the value of probability (Prob.) From the PAD, which is 0.085302> 0.05, then the variable PAD had no significant effect (statistical) against BM. The value of the regression coefficient was 0.125 DAU, which is positive. This value can be interpreted DAU positive effect on BM. Unknown probability value (Prob.) Of DAU, i.e. 0.0013 <0.05, then the variable DAU significant effect (statistical) against BM.

# 4.4 Significance of PE in relation Moderate PAD, DAU, against PE

Ghozali (2013) states "there are three ways to test regression with variable moderating, namely: (1) interaction test, (2) test of absolute difference value, and (3) residual test. In this study used residual test. The residual test is used because in the interaction test and the test of absolute difference value has a tendency to occur high multikolinearitas between independent variables and this will violate the classical assumption in ordinary least square regression (OLS) (Ghozali,

#### Vol. 4 (1), pp. 29-39, © 2018 AJES

2013, (Khaldun and Muda, 2014; Radianto *et al.*, 2014; Lutfi *et al.*, 2016; Erlina *et al.*, 2017; Hasan *et al.*, 2017). To overcome this multicollinearity, then developed another method called residual test".

Table 6. Significance of PE in Moderating association between PAD, DAU, against BM

Dependent Variable: MODERASI

Method: Least Squares Date: 02/28/17 Time: 08:21

Sample: 1 144

Included observations: 144

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y	0.078816	0.112247	0.702170	0.4837
C	-0.012792	0.252966	-0.050570	0.9597

Source: Sports Software Eviews 7 (2017).

Based on Table 6, the following equation moderation.

$$|E| = -0.0127 + 0.0788Y$$
 (1)

In testing the approach of moderation with residual test, a variable is said to be moderate if the independent variable dependent variable regression coefficient is negative and significant (Ghozali, 2013). Note that the regression coefficient of Y is positive (0.001> 0, i.e., positive). This means that the PE was not significant in relation moderate PAD, DAU to BM.

#### 5. Conclusions and recommendations

#### 5.1. Conclusions

This study was conducted to test whether the effect on local revenue and general allocation fund allocation of capital expenditures made by the district/city of North Sumatra and Aceh either partially or simultaneously, as well as test whether a moderator variable for economic growth affect the interaction of regional revenue and General Allocation fund to capital expenditures. The research sample as many as 36 districts/cities in North Sumatra and Aceh in 2012-2015. Samples were selected by purposive sampling method. Based on research, there are some things that can be inferred, among others: All independent variables, namely PAD and DAU, simultaneously, have a significant effect on the variable BM or together amounted to 23.61%, while the remaining 76.39% influenced by other factors. Local Revenue positive effect but not significant effect on capital spending as it is known regression coefficient of PAD is 0.0565 and a probability value (Prob.) From the PAD 0.0853>0.05. General Allocation Fund has a significant positive effect on capital spending as it is known from DAU the regression coefficient is 0.125 and the value of probability (Prob.) From the DAU 0.0013<0.05. Local Revenue and the General Allocation Fund simultaneously significant effect on capital spending against the Government of North Sumatra and Aceh as indicated by the value of Prob. (F-statistic), which is 0.000 <0.05.

Economic growth is not fully able to moderate (strengthen/weaken) the relationship between PAD and DAU with Government Capital Expenditure Regency/City in the province of North Sumatra and Aceh Province tahun2012-2015.

# 5.2. Suggestions

Based on the analysis of this study, researchers suggest:

- 1. For local government is expected to be more effective in managing local revenue and general allocation funds so that the province increased capital expenditures which will then improve the allocation of capital expenditure area.
- 2. For further research suggested that more decision multiply the number of variables, period, and samples to be used, so that multiple samples will be obtained and more accurate results.

# References

Achmad, N., Muda, I. (2017). Economic Activities of Karo Older Adults in Lingga Village, Tanah Karo Regency, North Sumatera, Indonesia. *International Journal of Economic Research*. 14(16). 365-379.

Agustina, D. (2011). Influence Analysis of Fiscal Decentralization on Infant Mortality Rate and Figures Continuing Smp / Mts Period 2007-2009 (Case Study: Central Java). Essay. Diponegoro University. Semarang.

### Vol. 4 (1), pp. 29-39, © 2018 AJES

Anasmen (2009). Effect of Government Capital Expenditure on Economic Growth in West Sumatra Province: 2000-2006. Thesis. University of Indonesia. Depok.

Ardhani, P. (2011). The Influence of Economic Growth, Local Original Income, General Allocation Funds and Special Allocation Funds to Allocation of Capital Expenditures Budget (Study on Districts / Cities in Central Java). Essay. Diponegoro University. Semarang.

Ardhini (2011). Effect of Regional Financial Ratios on Capital Expenditures for Public Services in Perspective of Agency Theory (Study on Regency and City in Central Java). Essay. Diponegoro University. Semarang.

Azlina, N., Hasan, A., Desmiyawati, Muda, I. (2017). The Effectiveness of Village Fund Management (Case Study at Villages in Coastal Areas in Riau). *International Journal of Economic Research*. 14(12). 325-336.

Badaruddin; R., Ermansyah, E., Muda, I. (2017). Village Governance With Implementation of Law Number 6 of 2014 On The Village and Village Administration. *International Journal of Economic Research*. 14(16). 350-363.

Bakti, T.D., Sumanjaya, R. and Nasution, S.H. (2011). Introduction to Macro Economics, USU Press, Medan.

Dalimunthe, D.M.J. and Muda, I. (2017). The Empirical Effect of Education and Training to the Performance of Employees. *International Journal of Applied Business and Economic Research*. 15(24). 5423-5437.

Dalimunthe, D.M.J.,Fadli and Muda, I. (2016). The application of performance measurement system model using Malcolm Baldrige Model (MBM) to support Civil State Apparatus Law (ASN) number 5 of 2014 in Indonesia. *International Journal of Applied Business and Economic Research*. 14(11), 7397-7407.

Erlina (2011). Research Methodology, USU Press, Medan.

Erlina, A.S., Muda, I. (2017). Antecedents of Budget Quality Empirical Evidence from Provincial Government In Indonesia. *International Journal of Economic Research*. 14(12). 301-312.

Erlina, A.S., Muda, I. (2017). The Analysis of the Influencing Factors of Budget Absorption. *International Journal of Economic Research*. 14(12), 287-300.

Fahmi, R. (2012). The Influence of Fiscal Decentralization and Economic Growth on Welfare of Regency and City Community in West Java Province. University of Pasundan. Bandung.

Ferine, K.F.; Ermiaty, C., Muda, I. (2017). The Impact of Entrepreneurship And Competence On Small Medium Enterprises Tangan Di Atas (TDA) Medan Entrepreneurs' Work Performance. *International Journal of Economic Research*. 14(16). 380-393.

Ghozali, I. (2013). Application of Multivariate Analysis with IBM SPSS19 Program, Semarang: Diponegoro University Publisher.

Government Regulation No. 55/2005 on Balancing Funds.

Government Regulation No. 71/2010 on Government Accounting Standards.

Gusnardi, Riadi, R.M., and Muda, I. (2016). Competency mapping and analysis of students competency based on economics subject national examination and its alternative solutions in state high schools at Pekanbaru. *International Journal of Economic Research.* 3(5). 2133-2148.

Handoko, B., Sunaryo, Muda, I. (2017). Difference Analysis of Consumer Perception of Motorcycle Product Quality. *International Journal of Economic Research*. 14(12). 363-379.

Hasan, A., Gusnardi, Muda, I. (2017). Analysis of Taxpayers and Understanding Awareness Increase in Compliance with Taxpayers Individual Taxpayers. *International Journal of Economic Research*. 14(12), 75-90.

Iskandar, M.A. (2012). The Effect of Capital Expenditure, Balancing Funds and Fiscal Self-Reliance on Regional Economic Growth (Empirical Study on Regency/Municipal Government in Java Island Period 2006-2010). Essay. University of Indonesia. Salemba.

Khaldun, Khalidazia, I., Iskandar, M. (2014). The Influence of Profitability And Liquidity Ratios on The Growth of Profit of Manufacturing Companiesa Study of Food And Beverages Sector Companies Listed on Indonesia Stock Exchange (Period 2010-2012). *International Journal of Economics, Commerce and Management*. 2(12). 1-17.

Kurniawan, D. "Regional Autonomy and Fiscal Decentralization in Indonesia", University of Sultan Fatah Demak.

Kusnandar, D. and Siswantoro. (2012). The Effect of General Allocation Funds, Local Original Income, Remaining More Budget Financing and Area to Capital Expenditures.

Law Number 17 Year 2003 regarding State Finances.

Law Number 23 Year 2014 on Regional Government.

Law Number 28 Year 2009 regarding Regional Tax and Regional Retribution.

Law Number 33 Year 2004 regarding Financial Balance Between the Central Government and Local Government.

Lubis, A., Rustam and Muda, I. (2016). Factors Affecting The Cost of Agency of Village Owned Enterprise (BUMDES) in Indonesia. *International Journal of Economic Research*. 14(16). 334-348.

Lubis, A., Torong, Z.B., Muda, I. (2016). The urgency of implementing balanced scorecard system on local government in North Sumatra – Indonesia. *International Journal of Applied Business and Economic Research*. 14(11). 7575-7590.

Lubis, A.F., Lubis, T.A., Muda, I. (2016). The role of Enterprise Resource Plan (ERP) configuration to the timeliness of the financial statement presentation. *International Journal of Applied Business and Economic Research*. 14(11), 7591-7608.

Lutfi, M., Nazwar, C., and Muda, I. (2016). Effects of investment opportunity set, company size and real activity manipulation of issuers in Indonesia Stock Exchange on stock price in Indonesia. *International Journal of Economic Research*. 13(5). 2149-2161.

Mahdaleta, E.; Iskandar, M. and Nasir, G.M. (2016). Effects of Capital Structure and Profitability on Corporate Value with Company Size as the Moderating Variable of Manufacturing Companies Listed on Indonesia Stock Exchange. *Academic Journal of Economic Studies*. 2(3). 30–43.

Maksum, A., Hamid, R., Muda, I. (2014). The Impact of Treasurer's Experience And Knowledge on The Effectiveness of The Administration and Preparation of The Accountability Reporting System in North Sumatera. *Asian Journal of Finance & Accounting*, 6(2), 301-318. http://dx.doi.org/10.5296/ajfa.v6i2.6341.

Marhayanie, M.I. and Muda, I., (2017). Impact of the Online Car Rental Service Order System on Sales Turnover with Financial Literacy Customer as Intervening Variables. *International Journal of Economic Perspectives*. 14(16). 317-332.

Maryadi (2014). "The Effect of Local Original Income, General Allocation Funds, Profit Sharing Funds, Remaining More Budget Financing and Area to Capital Expenditure at Regency and City in Indonesia 2012", Maritime University Accounting Journal Raja Ali Haii.

Module EViews 6, Development Unit of Faculty of Economics, Diponegoro University, Semarang. <a href="http://www.fajar.co.id/news.php?newsid=54335">http://www.fajar.co.id/news.php?newsid=54335</a>. Access on 10 July, 2017.

Muda, I. and Dharsuky, A. (2016). Impact of Capital Investments and Cash Dividend Policy on Regional Development Bank (BPD) PT. Bank Sumut to the District Own Source Revenue and Economic Growth. *International Journal of Applied Business and Economic Research*, 14(11), 7863-7880.

Muda, I. and Dharsuky, A. (2015). Impact of Region Financial Information System (SIKD) Quality, Role Ambiguity and Training on Precision of Financial Statement of Local Government Presentation in North Sumatra. *International Journal of Applied Business and Economic Research*, 13(6). 4283-4304.

Muda, I., Wardani, D.Y., Érlina, Maksum, A., Lubis, A.F., Bukit, R. (2017). The Influence of Human Resources Competency & The Use of Information Technology on The Quality of Local Government Financial Report with Regional Accounting System as an Intervening. *Journal of Theoretical & Applied Information Technology*. 95(19), 1432-1451.

Muda, I., Dharsuky. A., Siregar, H.S. and Sadalia, I. (2017). Combined loading and Cross-dimensional loadings timeliness of presentation of financial statements of local government. *IOP Conference Series: Materials Science and Engineering.* 180. doi: 10.1088/1757-899X/180/1/012099.

Muda, I., Sihombing, M. Jumilawati, E. and Dharsuky, A. (2016). Critical Success Factors Downstream Palm Oil Based Small And Medium Enterprises (SME) In Indonesia. *International Journal of Economic Research*. 13(8). 3531-3538.

Muda, I., Sihombing, M., Jumilawati, E. and Dharsuky, A. (2017). Factors Affecting The Success Of Local Innovation Systems With Government Programs As Moderators. *International Journal of Economic Research*. 14(16), 272-289.

Muda, I., Mutia, I. and Marhayanie (2017). Impact Allocation Capital Expenditure on The Improvement of the Local Government Assets in North Sumatra and Effect on Local Revenue Sustainability. *International Journal of Economic Perspectives*. 11(2). 151-164.

Muda, I., Rahmanta, S.A. and Marhayanie (2017). The Role of Working Capital, Productivity, Applied Technology and Selling Market Prices on Fisherman's Revenues. *International Journal of Economic Research*. 14(16). 291-302.

Muda, I. (2014). Analysis on the Timeliness of the Accountability Report by the Treasurer Spending in Task Force Units in Indonesia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 176-190.

Muda, I., Rasdianto, M. S. L. 2014. Implementation of the Cash Revenue System: A Case Study in the Local Government Task Forces' Units of North Sumatera Province, Indonesia. *Information Management & Business Review*, 6(2). 96-108.

Muda, I., (2017). Perception of capital, profit and dividends affect the stock purchase intention in Indonesia public company. *Junior Scientific Researcher*, 3(1). 9-18.

Muda, I., Rafiki, A., Harahap, M.R. (2014). Factors Influencing Employees' Performance: A Study on the Islamic Banks in Indonesia. *International Journal of Business and Social Science*, 5(2). 73-80.

Muda, I; M. Weldi; Siregar, H.S, Indra, N. (2017). The Analysis of Effects of Good Corporate Governance on Earnings Management in Indonesia with Panel Data Approach. *Iranian Economic Review.* 21(4). 657-669.

Muda, I. and Rafiki, A. (2014). Human Resources Development and Performance of Government Provincial Employees: A Study in North Sumatera, Indonesia. *Journal of Economics and Behavioral Studies*. 6(2).152-162.

Muda, I. (2017). The Effect of Allocation of Dividend of the Regional Government-Owned Enterprises and the Empowerment Efforts on the Revenue of Regional Government: The Case of Indonesia. *European Research Studies Journal. XX*(3A). 223-246.

Muda, I. (2017). The Effect of Supervisory Board Cross-Membership and Supervisory Board Members' Expertise to The Disclosure of Supervisory Board's Report: Empirical Evidence from Indonesia. *European Research Studies Journal. XX*(3A). 702-716.

Muda, I., Erlina, Bukit, R. and Rahmanta (2015). The Effect of Fiscal Potential, Fiscal Needs and Internal Control on the Provincial Intergovernmental Transfer Allocation In The Districts/Cities in North Sumatera – Indonesia. *International Journal of Management Sciences and Business Research*. 3(10). 22-35.

Muda, I. (2010). Contribution of Teluk Nibung Port Tanjung Balai Asahan to The Local Revenue of Tanjung Balai City. *Journal of Economics and Business*. 9(1). 17-28.

Muda, I. (2017). Role of Dividend of Power to Buy Shares in Companies in Indonesia Stock Exchange. *Academic Journal of Economic Studies*. 3(2), 41–47.

Muda, I. (2017). User Impact of Literacy on Treatment Outcomes Quality Regional Financial Information System. *Management Dynamics in the Knowledge Economy*. 5(2). 307-326; DOI 10.25019/MDKE/5.2.08.

Nasir, A., Basri, Y.B., Kamaliah, Muda, I. (2017). Effectiveness of Potential Tax Region as the Real Local Revenue Sources in Riau Coastal Area. *International Journal of Economic Research*. 14(12). 313-324.

Nurlina and Muda, I. (2017). The Analysis of the Effects of Capital Expenditure and Human Development Index on Economic Growth and Poverty in East Aceh Regency. *International Journal of Economic Research*. 14(16). 395-409.

#### **Academic Journal of Economic Studies**

#### Vol. 4 (1), pp. 29-39, © 2018 AJES

Nurzaimah, Rasdianto and Muda, I. (2016). The skills and understanding of rural enterprise management of the preparation of financial statements using Financial Accounting Standards (IFRs) financial statement on the Entities without Public Accountability (ETAP) framework on the implementation of village administration law. *International Journal of Applied Business and Economic Research*. 14(11), 7417-7429.

Prasetyia, F. "Part VIII: Federalism", Universitas Brawijaya. Poor.

Purnama, A. (2014). Effect of General Allocation Funds (DAU), Local Own Revenues (PAD), Remaining More Budget Financing (Remaining More Budget Calculations) and Area to Capital Expenditures on Districts and Cities in Central Java 2012-2013 Period. Essay. Muhammadiyah Surakarta University. Surakarta.

Putro, N.S. (2010). The Influence of Economic Growth, Local Original Income and General Allocation Fund to Allocation of Capital Expenditure Budget (Case Study at Regency / City in Central Java Province). Essay. Diponegoro University. Semarang.

Rahmanta (2009). "Application of EViews in Econometrics", USU Repository, Faculty of Agriculture, University of North Sumatra, Medan.

Rasdianto, Nurzaimah and Iskandar, M. (2014). Analysis on the Timeliness of the Accountability Report by the Treasurer Spending in Task Force Units in Indonesia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*. 4(4). 176–190. http://dx.doi.org/10.6007/IJARAFMS/v4-i4/1304.

Regulation of Directorate General of Treasury of Republic of Indonesia Number Per-33 / PB / 2008.

Regulation of the Minister of Finance of the Republic of Indonesia Number 91 / PMK.06 / 2007 concerning Standard Account Chart.

Regulation of the Minister of Home Affairs Number 13 Year 2006 regarding Guidelines on Regional Financial Management.

Sadalia, I., Rahamani, N.A.B., Muda, I. (2017). The Significance of Internet Based Financial Information Disclosure on Corporates' Shares in Indonesia. *International Journal of Economic Research*. 14(12). 337-346.

Sihombing, M., Iskandar, M., Jumilawati, E., Dharsuky, A. (2015). The Implementation of Oil Palm Based Regional Innovation System (SIDA) In Supporting The Masterplan For The Acceleration And Expansion Of Indonesia's Economic Development (MP3EI) of The Economic Corridor Of Sumatera-Indonesia. *European Journal of Business and Innovation Research*. 3(5),13-24.

Sirojuzilam, Hakim, S., and Muda, I. (2016). Identification of factors of failure of Barisan Mountains Agropolitan area development in North Sumatera – Indonesia. *International Journal of Economic Research*. 13(5). 2163-2175.

Sirojuzilam, Hakim, S., and Muda, I. (2017). Effect of Private Collaborative as a Moderation of Success of Agropolitan Program. *International Journal of Economic Research*. 14(16). 304-315.

Sudewi, Ayu, N.N. and Wirathi, I.G.A.P. (2012). "The Influence of Fiscal Decentralization and Economic Growth on Poverty in Bali Province", E-Journal of Development Economics Faculty of Economics, Udayana University, Volume 2, No. 3, pp. 135-141.

Sugiarthi, Rini, N.P.D.E. and Supadmi, N.L. (2014). "The Effect of Local Original Income, General Allocation Funds and Time More Budget Calculations on Capital Expenditures with Economic Growth as Moderators", E-Journal of Accounting Udayana University, Volume 7, Number 2, pp. 477-495.

Sunjoyo (2013). SPSS Application for Smart Research: Ibm SPSS 21 Program, PT. Alfabeta, Bandung.

Suriadi, A., Rudjiman, K.M., Achmad, N. and Iskandar, M. (2015). The Applicative Model of the Village\_Owned Enterprises (BUMDES) Development In North Sumatera. *Global Journal of Arts, Humanities and Social Sciences* 3(12), 48-62.

Syahrum and Salim (2012). Quantitative Research Methodology, Fourth Print: September 2012, Ciptapustaka Media, Bandung.

Syahyunan, Muda I, Siregar, H.S, Sadalia, I., Chandra, G. (2017). The Effect of Learner Index and Income Diversification on the General Bank Stability in Indonesia. *Banks and Bank Systems*. 12(4). 171-184.

Tarmizi, H.B., Daulay, M. and Muda, I. (2016). The influence of population growth, economic growth and construction cost index on the local revenue of tax on acquisition of land and building after the implementation of law no. 28 of 2009. *International Journal of Economic Research*. 13(5). 2285-2295.

Tarmizi, H.B., Daulay, M., and Muda, I. (2017). Impact of the Economic Growth and Acquisition of Land to the Construction Cost Index in North Sumatera. *IOP Conference Series: Materials Science and Engineering*. 180. doi: 10.1088/1757-899X/180/1/012004.

Waluyo, J., (2007). "The Impact of Fiscal Decentralization on Economic Growth and Inequality of Inter-regional Income in Indonesia", Parralel Session IA: Fiscal Decentralization. Wisma Makara Campus Universitas Indonesia, Depok.

Yahya, I, Torong, Z.B., and Muda, I. (2017). Influence Behavior in Legislature Budget Development of Regions in the Province of Aceh and North Sumatra. *International Journal of Economic Research*. 14(8). 147-159.

Yovita, F.M. (2011). The Influence of Economic Growth, Local Original Income, and General Allocation Fund to Allocation of Capital Expenditure Budget (Empirical Study on Provincial Government of Indonesia during 2008-2010 Period). Essay. Diponegoro University. Semarang.