Regional Tax and Levies, General Allocation Funds, and Special Allocation Funds Effects to the Capital Expenditures Allocation with Total Population as Moderating Variables in Districts/Cities in North Sumatera Provinces

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Keywords: Regional Taxes, Regional Levies, General Allocation Funds (DAU), Special Allocation Funds (DAK), Total Population, and Capital Expenditures.

Abstract: Objective of this study is to analyse the influence of various local government revenue sources (Regional Taxes and Levies, General Allocation Funds, and Special Allocation Funds) on fund allocation into Capital Expenditures and using Population as moderating variables. Taking into an account important role of Capital Expenditures in running the government system to improve public welfare. The population used in this study were all Regencies/Cities in North Sumatra, 33 Regencies/Cities from 2014–2016. Sample in this study were 23 Regencies/Cities using purposive sampling method of those districts/cities reported their annual financial statements. Data analysis technique used multiple linear regression analysis and for moderating variable analysis used absolute difference value test. The study results indicated that Regional Taxes, General Allocation Funds (DAU), and Special Allocation Funds (DAK) have positive and significant effects on the Capital Expenditures allocation, while Regional Levies shows a negative effect. The study also showed that Total Population was able to moderate all variables to Capital Expenditures.

1 INTRODUCTION

Decentralization is transfer of certain role of central government, with all of the administrative, political and economic attributes related to the it, to democratic local (i.e. municipal) governments which are independent of the central government within a legally delimited geographic and functional domain (Faguet, 2002). Decentralization empower local government to make policy suit for their environment for the purpose of public services improvement and promoting their local economy. To achieve the purpose and conduct their administration local government are required to improve their revenue and collect source of funding through local tax and local fee (Soewardi & Ananda, 2015). The Australian Constitution and case law require that different types of government collection must have certain characteristics to meet the legal definitions of tax, levy, charge, excise or penalty such as: (a) Compulsion. A tax is usually compulsory in that the taxpayer has no choice about whether to pay it. (b) Revenue raising. The most significant, though not sufficient, factor that needs to be considered is whether the purpose of the local government collection is to raise revenue. (c) Public purposes. Taxes are generally imposed for ‘public purposes’, including the financing of government expenditures. (d) Payment for services. The collection is not a tax when it is a ‘payment for services rendered’ or a ‘fee for services’, even though it may have similar nature of a tax. Whether a collection is a tax or a fee for service, it does not depend on the label given to it, but on its substance and operation. (e) Arbitrariness. To recognize as a tax, a collection must not be imposed in an arbitrary manner. Liability for a tax must be imposed by reference to criteria that are general and clear in their application, and not as a result of an administrative decision based on individual preference, unrelated to any test laid down by the legislation (Weier, 2006).

The concept of local autonomy and decentralization was introduced in Indonesia post reformation in 1998. The central government retains five functions that affect the nation and transfer11 functions to local governments, districts, and
municipalities to perform their obligations. The power of central government is limited to six broad areas consists of finance, foreign affairs, defence, security, religion, and state administration and justice (Nasution, 2016). Law No. 32 of 2014 revised of Law No. 32 of 2004 concerning regional government defines revenue for regional government, consists of: regional taxes, regional levies, and others, and transfer from central government in form of revenue sharing, DAU, and DAK. The law also explains regional autonomy’s right, authority and obligation of the autonomous region to regulate and manage their own government affairs and the interests of the local community. With regional autonomy each region is required to be able to manage all the resources, to finance regional expenditures, to increase services in various sectors, especially the public sector for various purposes such as to attract investors to invest in the region (Kemenhumkam, 2014).

Based on description above the study is being done to look into correlation of regional governmental revenue sources consists of regional taxes, regional levies, general allocation funds, and special allocation funds, and the capital expenditures allocation with population as moderating variables, with study cases for districts or cities in North Sumatra provinces. Discussion will be divided into: first regional taxes effects, second regional levies effects, third general allocation fund effects, special allocation fund effects, followed by reviewed whether total population can moderate all 4 variables.

2 THEOREICAL FRAMEWORK

A literature review refer to those of those article and papers that has been published by accredited scholars and researchers (D. Taylor & Procter, 2008).

2.1 Regional Government Revenue Sources

The state as a sovereign person of public law is manifested by its functions in society, functions that must be maintained from public funds. The state sovereignty in financial terms is manifested by taxation and is done with the tax authority, as a public institution. (Morar, 2015)Tax has always been an important and crucial tool for the government administration in almost all countries both developed and developing (Miskam, Noor, Omar, & Aziz, 2013). It is also the revenue sources for almost all countries. Tax collection can be divided into: Federal Tax and State or Local or Regional Taxes. Regional taxes consists of a vehicle and ownership transfer tax, a vehicle fuel tax, a surface water tax, a cigarette tax. Local taxes consist of a hotel tax, a restaurant tax, an advertisement tax, a public lightning tax, a non-metal and stone minerals tax, a parking tax, a land and building tax, a land and building acquisition tax, etc. Property taxes consists of land and building tax, land and building acquisition tax (UCLG, 2016).

Regional government can also generate revenue from levies. A levy is a temporary tax collection by federal, state or local governments and being used for a stated public purpose. A taxpayer can be liable for various levies’ depending on an individual annual taxable income. In comparison, a tax is usually a general contribution imposed on individuals, properties or businesses. Tax is collected and deposited into the government’s consolidated fund and further on is allocated to various purposes in accordance with the government plan (M. Taylor, 2012).

In accordance with Law No. 32 of 2014, regional government receives transfers of DAU, Revenue-Sharing Fund and DAK from the central government. DAU are funds sourced from national budget revenues allocated with the aim of equal distribution of financial capacity between regions to fund regional needs in the implementation of decentralization (Kemenhumkam, 2014). In addition, DAU has objective to reduce fiscal imbalances between sub-national governments. DAU transfers from central government are defined following certain formula, consists of a base allocation which is equal to the amount of spending on personal, and a fiscal gap allocation which can be positive or negative. This fund is then allocated 10% to at the provinces level and 90% at the districts and municipalities level; The transfer amount normally represents 50% of that of regional revenues. While DAK is a transfer system to fund responsibilities that are considered as national priorities (UCLG, 2016). DAK is a fund allocation from the national budget to certain regions to fund specific activities in certain areas such as activities in local development, improvement in infrastructure or public services (Kemenhumkam, 2005b).

2.2 Regional Government Expenditures

Government expenditures in form of public and capital spending which play significant roles in the operation of nation’s economies. Public expenditures can be divided into administrative, internal securities, health, education, etc. Capital expenditure refers to the amount spent in the acquisition of fixed and
productive assets whose useful life normally beyond the accounting or fiscal year, as well as spending incurred to upgrade or improve of existing infrastructures and fixed assets such as lands, building, roads, machines and equipment, etc., including intangible assets (Aigheyisi, 2013). In accordance with Law No. 58 of 2005, regional government spending is divided into Capital Expenditures and Non Capital Expenditures. An example of the later is local government employee salaries, etc (Kemenhumkan, 2005a).

Capital expenditures has wide-ranging benefits for a region’s economy. These benefits can be seen in term of improvement in the public capital facilities such as transportation, water, etc prevention in negative effects on public safety, and environmental protection (Fisher & Sullivan, 2016), in line with other study result showing that the government investment on infrastructure increases the marginal efficiency of private capital (Dadgostar & Mirabelli, 1998).

2.3 Total Population

Current understanding of population does not show a correlation between the effect of population growth and economic development of less developed areas. Some theoretical analyses propose that population growth creates pressure on natural resources, reduces private and public capital formation, and also resulting to capital resources allocation to regular spending instead of capital expenditures. On the other side, increase in population crate positive effects such as economies of scale and specialization, new generation with higher motivations compared with older ones (Atanda, A. A., Aminu, S. B., & Alimi, 2012). For the study purpose, we factor population as an important part of economy on the region.

Accordingly, we hypothesize the following:

H1: There is a positive and significant relationship between regional taxes and capital expenditures.
H2: There is a positive and significant relationship between regional levies and capital expenditures.
H3: There is a positive and significant relationship between DAU and capital expenditures.
H4: There is a positive and significant relationship between DAK and capital expenditures.
H5: There is a positive and significant relationship between all variables together regional taxes, regional levies, DAU, and DAK, and capital expenditures.
H6: Population can moderate between all variables together regional taxes, regional levies, DAU, and DAK, and capital expenditures.

3 RESEARCH METHOD

3.1 Research Sites

The literature study was conducted in the District/City in Provinsi Sumatera Utara using data available in website www.djpk.kemenkeu.go.id, and www.sumut.bps.go.id

3.2 Population and Sample

This study takes a population from District/City Government of North Sumatra Province which consists of 25 regencies and 8 cities for reporting period of 2014 to 2016. The sample of this study, is set using a purposive sampling method with criteria of districts/cities that produce their financial statements for 3 consecutive years from 2014 - 2016. A seen in table 3.1, for 69 samples consists of 23 regencies/cities for 3 years reporting period.

3.3 Types and Data Sources

The data type for this study is quantitative data, namely research methods based on the philosophy of positivism, used to examine a particular population or sample, data collection using research instruments, data analysis is quantitative/statistic with the aim of testing predetermined hypotheses (Pratama, 2017).

4 RESULT

Table 1: Multiple Linear Regression Analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>Understanding Coefficients</th>
<th>Residual Coefficients</th>
<th>R</th>
<th>R-Square</th>
<th>Standard Error</th>
<th>T</th>
<th>Significance</th>
<th>F</th>
<th>Degree of freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>222.046</td>
<td>64.582</td>
<td>5.046</td>
<td>0.001</td>
<td>37.69</td>
<td>2850</td>
<td>89.6</td>
<td>3,232</td>
<td></td>
</tr>
<tr>
<td>V1_Population</td>
<td>0.005</td>
<td>0.112</td>
<td>0.430</td>
<td>0.001</td>
<td>37.69</td>
<td>2850</td>
<td>89.6</td>
<td>3,232</td>
<td></td>
</tr>
<tr>
<td>V2_Firm</td>
<td>0.013</td>
<td>0.174</td>
<td>0.420</td>
<td>0.001</td>
<td>37.69</td>
<td>2850</td>
<td>89.6</td>
<td>3,232</td>
<td></td>
</tr>
<tr>
<td>V3_DAU</td>
<td>0.005</td>
<td>0.073</td>
<td>0.103</td>
<td>0.001</td>
<td>37.69</td>
<td>2850</td>
<td>89.6</td>
<td>3,232</td>
<td></td>
</tr>
<tr>
<td>V4_DAK</td>
<td>0.005</td>
<td>0.030</td>
<td>0.020</td>
<td>0.001</td>
<td>37.69</td>
<td>2850</td>
<td>89.6</td>
<td>3,232</td>
<td></td>
</tr>
</tbody>
</table>

Based on table 1 above, multiple linear regression equations obtained, as follow:

Y = 223.046 + 0.383X1 - 0.073X2 + 0.155X3 + 0.232X4 + e.

The multiple linear regression equation above showed that regional tax (B = 0.383), DAU (B=0.155) and DAK (B=0.232) has a positive relation with capital expenditures. Meanwhile regional levies showed a negative correlation (B=-0.073) with...
capital expenditures. The negative correlation indicates increase in the levies does not contribute to increase in capital expenditures.

Table 2: Determination Coefficient Analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.776</td>
<td>0.603</td>
<td>0.576</td>
<td>62.97841</td>
</tr>
</tbody>
</table>

Based on table 2 above, it is shown coefficient of determination (R-Square) at 0.603. These values can be interpreted as variables of Local Taxes, Local Levies, DAU, and DAK together explains 60.3% variations in Capital Expenditures, the remaining 39.7% is explained by other variables or factors.

Table 3: Significance of Simultaneous Effect Test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regressor</td>
<td>358,470,774</td>
<td>4</td>
<td>94,606,434</td>
<td>24.207</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>253,841,958</td>
<td>64</td>
<td>3966.280</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>430,312,732</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 3, it is known that Fcount is 24.297 > Ftable value of 2.76 and with probability value (Sig.) 0.000 < 0.05. This means that the regional taxes, regional levies, DAU, and DAK simultaneously/jointly significantly has effect on Capital Expenditures.

Table 4: t-test.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>228.046</td>
<td></td>
<td>5.063</td>
<td>.000</td>
</tr>
<tr>
<td>V4_Pajak</td>
<td>.362</td>
<td>.112</td>
<td>.420</td>
<td>3.924</td>
</tr>
<tr>
<td>V2 _Retribu</td>
<td>.073</td>
<td>.174</td>
<td>.096</td>
<td>-4.20</td>
</tr>
<tr>
<td>V3_DAU</td>
<td>.156</td>
<td>.073</td>
<td>.200</td>
<td>2.132</td>
</tr>
<tr>
<td>V4_Chare</td>
<td>.257</td>
<td>.085</td>
<td>.208</td>
<td>2.790</td>
</tr>
</tbody>
</table>

Table 5: The Absolute Difference Value Test.

Based on the research results obtained that regional tax has a significant and positive impact on Capital Expenditures, this is seen from the t test in table 4.4, a significant level of 0.001 which is smaller than 0.005 and a positive regression coefficient of 0.383, so the hypothesis of the influence of regional tax on allocation Capital Expenditures are accepted. This means that regional taxes increase will trigger an increase in the allocation of Capital Expenditures, Law No. 28 of 2009 explains that tax is used for the purposes of the state for the greatest prosperity of the people. Tax revenue is meant for state financing and national development, through the allocation of the tax revenue to capital expenditures for public needs. Regional tax is a component of local revenue that describes the independence of an area and has the largest contribution in providing income for the region, the Regional Government has the authority to

5 DISCUSSION

5.1 Regional Taxes Effects

Based on the research results obtained that regional tax has a significant and positive effect on Capital Expenditures, this is seen from the t test in table 4.4, a significant level of 0.001 which is smaller than 0.005 and a positive regression coefficient of 0.383, so the hypothesis of the influence of regional tax on allocation Capital Expenditures are accepted. This means that regional taxes increase will trigger an increase in the allocation of Capital Expenditures, Law No. 28 of 2009 explains that tax is used for the purposes of the state for the greatest prosperity of the people. Tax revenue is meant for state financing and national development, through the allocation of the tax revenue to capital expenditures for public needs.
allocate its income in the direct expenditure sector or for capital expenditure, this means in North Sumatra from 2014-2016 allocates tax for Capital Expenditures. This study results are in line with prior research, (Jaya & Dwirandra, 2014) which concluded that there is a significant positive effect of Regional Taxes to Capital Expenditures. But it is different from the study of (Juwari, Setyadi, & Ulfah, 2016) which stated variable Regional Taxes do not have an impact on Capital Expenditures because income from tax is less so that it relies on balancing funds to finance its Capital Expenditures.

5.2 Regional Levies Effects

The study results showed that there is no significant effect of regional levies to capital expenditures, this is seen from the t test in table 4.4, a significant level of 0.676 which is greater than 0.05 and the regression coefficient is negative that is -0.073, so the hypothesis of the influence of regional levies to allocation of Capital Expenditures is not supported. This is in line with the prior research (Juwari et al., 2016), stating that there is no significant effect of regional levies to Capital Expenditures because the income from regional levies is less so that it relies on balancing funds to finance its Capital Expenditures. This research is different from the other research (Jaya & Dwirandra, 2014), who stated that regional levies had a significant effect into Capital Expenditures.

5.3 General Allocation Fund Effects

Based on the research results obtained, there is a significant effect of DAU to capital expenditures, this is seen from the t test in table 4.4, a significant level of 0.037 which is smaller than 0.05 and regression coefficient of 0.155 so that the hypothesis on DAU effect on the allocation of capital expenditures is accepted. This is in line with the prior research (Yawa & Runtu, 2015), which stated that there is a positive and significant effect of DAU to capital expenditures. This research is different from the other research (Jaya & Dwirandra, 2014), which stated that there is no effect of DAU to capital expenditures.

5.4 Special Allocation Fund Effects

The study results showed there is a significant positive effect of DAK on capital expenditure, this is seen from the t test in table 4.4, a significant level of 0.007 which is smaller than 0.05 and the regression coefficient is positive that is 0.232 so the hypothesis of the influence of DAK on capital expenditures allocation is accepted, which means if the DAK in a region increases, capital expenditures will also increase. The study results is in line with the prior research (Wandira, 2013) which stated that there was a significant influence between DAK variables on capital expenditure, while in (Tolu, Walewangko, & Tumangkeng, 2016), there is positive effect of DAK capital expenditure allocation, because the need was a national commitment or priority.

5.5 Regional Taxes, Regional Levies, General Allocation Fund, and Special Allocation Fund Effects Combined

Based on simultaneous testing (F), the variables of regional taxes, regional levies, DAU and DAK have a significant effect on the allocation of capital expenditures, this is seen from the F test in table 4.3, the significance level of 0.000 this means the significance level <5% (0.05) and seen from the testing of the coefficient of determination (R Square) in table 4.3 of 0.603, this means that 60.3% of the Capital Expenditure variable can be explained by the four independent variables which is regional tax, regional levies, DAU, and DAK, and the remaining 39.7% explained by other potential variables outside the model. Regional taxes, regional levies, DAU and DAK are all revenues sources for region that can be allocated to finance the needs in the region, one of which is Capital Expenditure.

5.6 Population Effects

Based on the results of the research obtained, the population was able to moderate local taxes, regional levies, DAU, and DAK on Capital Expenditures. This is seen from the test of the absolute difference value in table 4.5, the significant level of 0.049 which is smaller than 0.05 and the regression coefficient is positive that is 61.684 so that it can be said that the Population is able to moderate the relationship of local taxes, regional levies, DAU, and DAK to capital expenditures.

6 CONCLUSIONS

Study results shows that three is a significant positive effect of variables Regional Taxes, General Allocation Fund and Special Allocation Fund, on the allocation of Capital Expenditures. This mean that certain increases/decreases in Regional Taxes is
responded through positive changes or have influences in allocation of Capital Expenditures. Another test shows all four variables together Regional Taxes, Regional Levies, DAU and DAK have positive and significant effect on the allocation of Capital Expenditures. This means certain increases/decreases in Regional Taxes is responded through positive changes or have influences in allocation of Capital Expenditures. While regional levies alone do not have a significant effect on the allocation of Capital Expenditures. The study results showed that Population as a moderating variable has a significant level, which means that the population is able to moderate all variables on the allocation of capital expenditure.

The study is far from conclusive on variables to capital expenditures allocation nor the reasons to why regional levies which is also a revenue sources, does not follow the same trend as the other three variables. Which might require a more in-depth study. Another area could also be explored by adding another modifying variable such as economic growth and inflation rates or expanding the scope beyond 3 (three) years as used in this study, and inclusion those district/cities absence from the respondent lists.

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