

The Effects of Local Financial Independence, Local Revenue Effectiveness and Local Financial Efficiency on Capital Expenditure with Balancing Fund as Moderating Variable: Empirical Study at Province of Sumatera Utara

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Abstract: This study aims to test the effects of local financial independence, local revenue effectiveness and local financial efficiency on capital expenditure in the Regencies/Cities of North Sumatera Province in the period of 2014-2016. This research uses 99 samples consisting of 33 regencies/cities. The data is obtained from the Directorate General of Fiscal Balance in the form of local government financial reports. The result of this study shows that local revenue effectiveness and local financial efficiency have positive and significant influence on capital expenditure. However, the local financial independence has no significant effect on capital expenditure. This study also finds that balancing fund can moderate the effects of local financial independence, local revenue effectiveness and local financial efficiency on capital expenditure.

1 INTRODUCTION

Regional expenditure is prioritized to protect and improve the quality of community life in an effort to fulfil regional obligations. Regional expenditure is divided into two, namely direct and indirect regional expenditure. Direct regional expenditure is the expenditure of local budget activities and directly related to the implementation of local government programs and activities. Regional expenditure is directly divided into personnel expenditures, goods and services expenditures, and capital expenditures. While, indirect regional expenditures are local budgeted activities and have no direct relationship with the implementation of programs and activities. Indirect expenditure is divided into personnel expenditures, interest, subsidies, grants, and social assistance, revenue-sharing, unexpected financial and shopping assistance.

Based on the principle of regional autonomy that is concerned with people's welfare, direct expenditure is the expenditure that should be the government's priority, especially in capital expenditure. Capital expenditure is a regional government expenditure that has an important

influence on the economic growth of a region and will have leverage in moving the wheels of the regional economy. Therefore, local governments should make a shift in the composition of expenditures that would later increase public confidence (Kuncoro, 2004). Local governments allocate funds in the form of capital expenditure budget to add fixed assets. The allocation of capital expenditure is based on regional needs for facilities and infrastructure, both for the smooth implementation of government tasks and for public facilities. However, many local governments do not properly allocate their budget.

This research uses government financial report data in North Sumatra Province. Table 1 below shows that the average proportion of capital expenditure in North Sumatera has fluctuated every year (MFI, 2018). However, the proportion of capital expenditure in North Sumatra province is generally still low. Table 1 show that indirect expenditure is greater than capital expenditure. The government must be able to allocate a proportion of regional spending that is better to improve the welfare of the community. Thus, the success of regional autonomy is also inseparable from financial performance.

Table 1: Capital expenditure in North Sumatera province.

| Year | Indirect Expenditure | Capital Expenditure |
|------|----------------------|---------------------|
| 2012 | 6,279,156 | 803,608 |
| 2013 | 5,985,677 | 760,722 |
| 2014 | 4,969,775 | 1,145,972 |
| 2015 | 6,037,175 | 932,244 |
| 2016 | 7,188,137 | 1,019,855 |

Regional financial performance can be measured using regional financial ratio such as ratio of local financial independence, ratio of local revenue effectiveness, and ratio of local financial efficiency (Ardhini, 2011). Financial ratio information can be used to: assess regional financial independence in financing regional autonomy, measure efficiency and effectiveness in realizing regional income, determine the extent to which local government activities in spending their local income, and evaluate the contribution of each source of income in the formation of regional income. Finally, financial ratios also describe the growth of income and expenditure over a period of time (Halim, 2008).

1.1 Capital Expenditure (Y)

This study describes the definition of capital expenditure based on Regulation of Ministry of Home Affairs, Number 13 of 2006, concerning Guidelines on Regional Financial Management Article 53 (PMDN, 2006). Capital expenditure is the budget for regional income and expenditure which is used for expenditures made in the framework of the purchase / procurement or construction of fixed assets with a benefit value of more than 12 (twelve) months for use in government activities, such as in the form of land, equipment and machinery, buildings and buildings, roads, irrigation and networks, and other fixed assets. Based on the Regulation of Ministry of Home Affairs, capital expenditure consists of five types, such as, capital expenditure of machine equipment, land capital expenditure, capital expenditure of building, capital expenditure of road, irrigation and network, and other physical capital expenditure.

1.2 Local Financial Independence (X1)

Local financial independence indicates the level of ability of a region in self-financing government activities, development and services to the community who have paid taxes and levies as a source of income required area. Ratio of local financial independence is indicated by the amount of local revenue compared to regional income derived from other sources (revenue transfer), among others:

tax-sharing, tax-sharing share of natural resource taxes, general allocation funds and special allocations, emergency funds and loans (Halim, 2008). If the level of regional dependence on the assistance of external parties of the central and provincial governments is low, the independence of the regional will be even higher. However, if the independence of an area falls, the dependence of the region on the central government will be even higher. It can be indicated that if local original income is high, the allocation of capital expenditure can be realized smoothly. Therefore, this study argues the regional financial independence ratio is positively related with capital expenditure.

1.3 Local Revenue Effectiveness (X2)

Local revenue effectiveness shows the ability of local governments to realize the planned local revenue in accordance with the target set based on the real potential of the region itself (Mahmudi, 2010). The effectiveness of local revenue is categorized into 5 levels of effectiveness, namely: very effective (>100%), effective (90% -100%), effective enough (80% -90%), less effective (60% -80%), not effective (< 60%). Thus, this studies hypothesize that the higher the ratio of local revenue effectiveness, the better the performance of the local government and then the higher the capital expenditure.

1.4 Local Financial Efficiency (X3)

The local financial efficiency illustrates the comparisons between the amount of costs incurred for income generation and the realization of received revenues (Paul and Kenneth, 2003). An activity has run efficiently if the implementation of the work has reached the output with the lowest cost or with a minimal cost of the desired result. The allocation of capital expenditure is important to be realized effectively to meet the demands and needs of the local community and to facilitate development and improve public service facilities. Thus, this studies hypothesize that the higher the ratio of local financial efficiency, the higher the capital expenditure.

1.5 Balancing Fund (Z)

According to Law No.33 of 2004 (BPK, 2004), the central and regional financial balances are a system of government financing in order to minimize the fiscal gap between central and regional government. It includes the financial distribution between the central and regional governments as well as equitable,

democratic, equitable and inter-regional split between regions transparent with due regard to local potentials, conditions and needs in line with the obligations and distribution of authority and procedures for the administration of such authority, including the management and oversight of its finances. Balancing Funds are divided into profit-sharing funds, general allocation funds and special allocation funds.

2 MATERIALS AND METHODS

This study constructs a model of multiple regression equation to the relationship between local financial independence, local revenue effectiveness, local financial efficiency and capital expenditure with balancing fund as moderating variable.

2.1 Operational Definition and Measurement of Research Variables

The variables of this study are one dependent variable, three independent variables, and one moderating variable. The explanation of each variable as below:

2.1.1 Dependent Variables

Dependent variable in this research is capital expenditure (CE). Capital expenditures are the expenditures of local governments with benefits exceed one year. The expenditures will add to the assets or wealth of the area and will subsequently add to routine expenditures.

2.1.2 Independent Variables

Independent variables in this study are local financial independence, local revenue effectiveness, and local financial efficiency. First, local financial independence indicates the ability of a region in self-financing government activities, development and services to people who have paid taxes and levies as a source of income required by the region. Second, local revenue effectiveness reflects the ability of local governments to realize the original planned regional revenues compared to targets set by the real potential of the region. Third, local financial efficiency illustrates the comparisons between the amount of costs incurred for income generation and the realization of received revenues.

2.1.3 Moderating Variable

A moderating variable has a role to strengthen or weaken the relationship between independent variables and dependent variable. This study argues that balancing fund will strengthen or weaken the relationship between local financial independence, local revenue effectiveness, and local financial efficiency with capital expenditure.

2.2 Research Model

This study applies a multiple regression model to test the effect of independent variables on dependent variable. Then, the role of moderating variable is tested using the residual analysis model. The final sample of this study is 33 regencies in the period of 2014-2016. Thus, the total of study observation is 99.

2.3 Data Collection

This study uses a quantitative data. Source of this research data is secondary data from budget report of state revenue and expenditure and its realization report in province of Sumatera Utara. The data can be accessed from the website of Directorate General of Fiscal Balance of Ministry of Finance (<http://www.djpk.kemenkeu.go.id>).

3 RESULTS AND DISCUSSION

3.1 Descriptive Statistic

Table 2: Descriptive statistic.

| | N | Min | Max | Mean | Std. Dev. |
|-----------|----|------|------|------|-----------|
| CE | 99 | 2.27 | 3.72 | 3.13 | 0.299 |
| RLFI | 99 | 0.71 | 4.58 | 2.24 | 0.801 |
| RLRE | 99 | 3.03 | 5.39 | 4.60 | 0.412 |
| RLFE | 99 | 4.39 | 4.91 | 4.60 | 0.090 |
| Valid (N) | 99 | | | | |

Note: Capital expenditure (CE); Local financial independence (RLFI); Local revenue effectiveness (RLRE); Local financial efficiency (RLFE); Valid N (list wise).

3.2 Classical Assumption Testing

3.2.1 Normality Test

Table 3A: Normality test.

| One-Sample Kolmogorov-Smirnov Test | | | |
|------------------------------------|-----------|--------|--------|
| | | CE | RLFI |
| N | | 99 | 99 |
| Normal Parameters ^{a,b} | Mean | 3.1309 | 2.1426 |
| | Std. Dev. | .29932 | .58752 |
| Most Extreme Differences | Absolute | 0.072 | 0.051 |
| | Positive | 0.028 | 0.039 |
| | Negative | -0.072 | -0.051 |
| Kolmogorov-Smirnov Z | | 0.714 | 0.504 |
| Asymp. Sig. (2-tailed) | | 0.689 | 0.961 |

Table 3B: Normality test.

| One-Sample Kolmogorov-Smirnov Test | | | |
|------------------------------------|-----------|--------|--------|
| | | RLRE | RLFE |
| N | | 99 | 99 |
| Normal Parameters ^{a,b} | Mean | 4.6099 | 4.5940 |
| | Std. Dev. | .37680 | .08285 |
| Most Extreme Differences | Absolute | 0.126 | 0.116 |
| | Positive | 0.082 | 0.112 |
| | Negative | -0.126 | -0.116 |
| Kolmogorov-Smirnov Z | | 1.251 | 1.154 |
| Asymp. Sig. (2-tailed) | | 0.088 | 0.140 |

Normality test result shows that the value of Asymp. Sig. (2-tailed) of all variables is greater than the expected value of significance of 0.05. It means that this data is normally distributed.

3.2.2 Multicollinearity Test

The result of multicollinearity test shows the tolerance value of all independent variables are greater than 0.1. In addition, the value of Variance Inflation Factor (VIF) is below 10. Thus, there is no multicollinearity problem in this study.

Table 4: Multicollinearity test.

| Model | Collinearity Statistics | |
|-------|-------------------------|-------|
| | Tolerance | VIF |
| 1 | (Constant) | |
| | RLFI | 0.951 |
| | RLRE | 0.876 |
| | RLFE | 0.892 |

a. Dependent Variable: CE

3.2.3 Autocorrelation Test

The test shows that Durbin Watson value is 1.904, which the value is located between 1.736 to 2.264 (see Table 5). It means there is no autocorrelation problem.

Table 5: Autocorrelation test.

| Model | 1 |
|----------------------------|-------------------|
| R | .676 ^a |
| R Square | 0.456 |
| Adjusted R Square | 0.439 |
| Std. Error of the Estimate | 0.22413 |
| Durbin-Watson | 1.904 |

a. Predictors: (Constant), RLFI, RLRE, RLFE

b. Dependent Variable: CE

3.3 Result of Multiple Regression

Table 6: Regression result model 1-2.

| | Model 1 | Model 2 |
|----------------|-----------------------|----------------------|
| (constant) | -5.076 (-4.012)*** | |
| RLFI | -0.022 (-0.548) | |
| RLRE | 0.351 (5.471)*** | |
| RLFE | 1.444 (4.991)*** | |
| Balancing fund | | -0.162 (-2.135)** |
| F-value | 26.590 | 26.590 |
| Sig | 0.000 | 0.000 |

This research uses multiple regression analysis to test the effect of local financial independence, local revenue effectiveness, and local financial efficiency on capital expenditure. Table 6, model 1 shows a significant positive relationship between local revenue effectiveness and capital expenditure

($\beta=0,351$. Sig = 0,000). This study also finds the effect of local financial efficiency on capital expenditure is positive and significant ($\beta=1,444$. Sig = 0,000). This study concludes that local revenue effectiveness and local financial efficiency bring a positive role in increasing the government capital expenditure. However, this study finds that the coefficient of local financial independence is not significant. Further, Table 6, model 2 shows that there is moderation effect of balancing fund. It can be concluded that the effects of local financial independence, local revenue effectiveness, and local financial efficiency on capital expenditure are different in these two situations: high balancing fund versus low balancing fund.

4 CONCLUSION

The result of this study indicates that a regional government that achieves revenue realization is higher than the target set, can be said to be an independent region in managing the potential and financial management of the region. This region with high local revenue effectiveness has a high capital expenditure as well. Furthermore, this research also finds that a region where the implementation of their work has achieved good output with the lowest input (high local financial efficiency) show a large capital expenditure. And, this study finds that the situations explained above (the positive influence of local revenue effectiveness and local financial efficiency on capital expenditure) are different in both conditions: region with high balancing fund and region with low balancing fund).

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