The Influence of Fiscal Autonomy and Local Expenditure Towards Economic Growth in Southern Sumatera, Indonesia

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Abstract: Provinces in Southern Sumatra have different rate of economic growth. In 2016, Southern Sumatera provinces of which economic growth is higher than the national economic growth were Lampung and Bengkulu. Meanwhile the economic growth of South Sumatera, Jambi, and Bangka Belitung in the same year was lower than the national economic growth. The phenomena are the underlying reason for conducting this study in Southern Sumatera. Objective of this study was to analyze influence of fiscal autonomy and local expenditure towards economic growth in Southern Sumatera. The population was 5 provinces in Southern Sumatera. The data were panel data observed between 2012 and 2016. The finding showed that Local Retribution, Staff Expenditure, and Capital Expenditure had positive influence towards economic growth, while Local Tax had negative influence towards the economic growth in Southern Sumatera.

1 INTRODUCTION

Economic growth is a process to increase output from time to time and becomes an important indicator to measure how successful development is (Todaro & Smith, 2011; Septiatin, Mawardi & Rizki, 2016; Ma’ruf & Whastuti 2012). Economic growths a pivotal phenomenon a country or region has to pay close attention to. In general, local economic growth is an indicator to measure local economic growth. It is related to an increase in public economic activities. It is expected that the increase results in trickle-down effect. Therefore, economic growth should become one of the targets of both local and national development.

Todaro & Smith (2011) categorically states there are three factors that be the main components that influence economic growth, namely capital accumulation, population growth and the number of workforce that are considered to be driving economic growth. Government expenditure also has an important role in the process of economic growth. This can be seen from the goods and services produced by an area that can affect the increase in people's living standards.

The implementation of the government's role in the process of economic growth is one of them in the form of expenditure. Government expenditure is often referred to as local expenditure, which is a fiscal policy that is useful for stimulating the economy and creating jobs. Private investment and government expenditure should increase economic growth; this is the development of an endogenous growth model developed by Romer (2015); and Lucas (1988). The endogenous growth model of Barro (1990) explains that productive government spending will affect growth rates. One of the government expenditures that can increase economic growth is capital expenditure in the form of infrastructures such as electricity, transportation, education, and health.

Economic growth in Indonesia between 2012 and 2016 was fluctuating. Between 2012 and 2015, the national economy showed negative trend but it was growing in 2016. An area in Indonesia that has various rate of economic growth is Southern Sumatera. Provinces in Southern Sumatera have a unique economic growth. Based on the data from the National Bureau of Statistics, in 2016, the Southern
Sumatera provinces of which economic growth is higher than the national economic growth were Lampung and Bengkulu. On the other hand, the economic growth of South Sumatera, Jambi, and Bangka Belitung in the same year was lower than the national economic growth (National Bureau of Statistics, 2017).

Several factors that influence economic growth are Fiscal autonomy (Barimbing & Karmini, 2015; Priambodo, 2014; Tahar & Zakhya, 2011) and local expenditure (Hamsinah, Mursinto & Soekarnoto, 2014; Wu, Tang, Lin, 2010; Zahari, 2017).

The objective of this study was to analyze influence of Fiscal autonomy and local expenditure towards economic growth in Southern Sumatera, which consisted of Jambi, South Sumatera, Bangka Belitung, Bengkulu, and Lampung. There are only few studies investigating the influence of fiscal autonomy and local expenditure towards economic growth in all provinces in Southern Sumatera. It is expected that this study can fill the gap and it also becomes originality of this study. Both the national and local (Southern Sumatra) government can use finding of this study as recommendation to increase economic growth in the area. In addition, the finding can also be used as reference for future researchers.

2 LITERATURE REVIEW

2.1 Economic Growth

Economic growth is process of increasing production capacity of an economic system; economic growth is represented in the form of an increase in national income. A country’s economy is growing when its Gross Domestic Product (GDP) is increasing. Economic growth is one indicator of successful economic development (Jhingan, 2000).

Economic growth means the development of activities in the economy which causes the goods and services produced in society to increase and the prosperity of the community to increase. The problem of economic growth can be seen as a macroeconomic problem in the long run. The ability of a country to produce goods and services will increase from one period to the next.

According to Kuznets as cited in Dumaury (1997), economic growth is defined as a long-term increase in ability of a country to provide more economic goods to its citizens. This ability grows according to technological advances, and both institutional and ideological adjustments a country needs.

The definition of Kuznets's economic growth has three components, namely: first, a nation's economic growth can be seen from the continual increase in inventory; both advanced technologies are factors in economic growth that determine the degree of growth in the ability to supply various kinds of goods to the population; and thirdly the widespread and efficient use of technology requires adjustments in the institutional and ideological fields so that the innovations produced by human sciences can be utilized appropriately.

Gross Domestic Product (GDP) is the amount of added value produced by all business units in a particular country or is the sum of the value of final goods and services produced by all economic units. GDP at current prices illustrates the added value of goods and services calculated using the prevailing prices every year, while GDP at constant prices shows the added value of goods and services calculated using prices that apply to a given year as a basis for calculation.

Calculation of GDP figures uses three approaches, namely:

1. Production Approach defines GDP is the amount of added value for goods and services produced by various production units in the territory of a country within a certain period (usually one year). The production units are grouped into nine business fields (sectors), namely: agriculture, mining, processing industry, electricity, gas and clean water, building, transportation, finance, and services.

2. Income Approach defines GDP is the amount of remuneration received by the factors of production that participate in the production process in a country within a certain period. Repayment services for production factors are wages and salaries, land rent, capital interest, and profits; all before deducting income tax and other direct taxes. In the definition of GDP also includes depreciation and net indirect tax (indirect tax minus subsidies).

3. Expenditure Approach defines GDP is all components of final demand consisting of household consumption expenditure and non-profit private institutions, government consumption, gross domestic fixed capital formation, changes in stock and net exports (exports minus imports).

GDP is the most suitable indicator of economic growth (Mankiw, 2010), but Gross Regional Domestic Bruto (GRDB) is an indicator to measure local economic growth. Economic growth in general is closely related to increasing production of goods.
and service. It is measured using GRDP, an indicator to identify economic growth in an area.

Keynes argues that the level of activity in the economy is determined by aggregate expenditure. In general, aggregate expenditure in a given period is less than the aggregate expenditure needed to reach the full employment level. This situation is caused by investments made by entrepreneurs usually lower than the savings that will be made in the full employment economy. Keynes argues that a free market system will not be able to make adjustments that will create full employment (Jhingan, 2000).

Maynard Keynes presented a model to overcome the crisis that hit Europe around 1930 after the First World War. The Keynesian model shows that during a recession, budget expansion policies must be carried out to increase aggregate demand in the economy to increase the Gross Domestic Product (GDP). Keynes considers public spending as an exogenous factor that can be used as a policy instrument to encourage economic growth. From Keynesian thought, government spending can contribute positively to economic growth. Therefore, an increase in government spending tends to lead to increased employment, profitability and investment through a multiplier effect on aggregate demand. As a result, government spending adds to aggregate demand, which provokes an increase in output depending on expenditure multipliers. In economic theory, the role of government expenditure emerged as a growth theory of the Keynesian Harrod-Domar or the Harrod-Domar growth model (Todaro & Smith, 2011).

According to Keynesian theory in his book The General Theory of Employment, Interest, and Money which discusses the relationship between government expenditure and economic growth from the increase in total economic income output in the short term, largely determined by the desire of households, companies, and governments to spend their income. To model the Keynesian view of the effect of government spending on economic growth, this is illustrated by modeling called Keynesian intersection (Mankiw, 2010).

2.2 Fiscal Autonomy

Local financial independence or often referred to as fiscal autonomy shows ability of a region to finance their own government activities, development, and services to people who have paid taxes and levies as sources of income local government needs (Halim and Kusufi, 2014). Independence is ratio of regional finance indicated by comparison between Local Own-Source Revenue (PAD) and total local revenue. This ratio also illustrates local government dependence towards external funding sources. The higher the independence ratio is, the lower the level of regional dependence towards external funding source is lower; this results in local economic growth (Barimbing & Karmini, 2015; Priambodo, 2014; Tahar & Zakhiya, 2011).

Conceptually there are four relationship patterns that show the level of regional independence, namely (Paul Hersey and Kenneth Blanchard in Halim, 2007):
1. The pattern of instructive relations, the role of the central government is more dominant than the independence of local governments with a ratio of 0% -10%.
2. The pattern of consultative relations, the intervention of the central government has begun to diminish because the regions are considered to be better able to carry out autonomy with a ratio of 10% -20%.
3. The pattern of participatory relations, the role of the central government has diminished, given the area concerned is close to being able to carry out autonomous affairs with a ratio of 20% -30%.
4. The pattern of delegative relations, the intervention of the central government is not there because the regions have been truly capable and independent in carrying out the affairs of regional autonomy with a ratio of 30% -40%.

Regional independence is measured by regional financial independence, in the form of a ratio of the size of Regional Original Income (PAD) compared to total regional income. Regional Original Income (PAD) is one of the sources of revenue that must always be spurred on by growth. In this regional autonomy, the independence of the regional government is highly demanded in financing regional development and service to the community. Therefore, investment growth in the regency and city government needs to be prioritized because it is expected to have a positive impact on improving the regional economy.

Halim and Kusufi (2014) explained that Local Own-source Revenue refers to all local revenue derived from local economic sources. Mardiasmo (2002) stated that Local Own-source Revenue includes local tax, local retribution, revenue from separated local wealth management, profit of local government-owned companies and other legitimate revenue.

Based on the 2009 Decree number 28 on local tax, local tax is compulsory premium derived from
an individual or institution without equal direct return that can be enforced out based on applicable regulations for local government programs/activities and local development. Furthermore, local retribution is local levies as payment for particular service/license granted by local government to an individual/institution.

Other legitimate Regional Revenues are local revenues originating from others belonging to the regional government. This account is provided to ensure receipt of areas other than those mentioned above. This type of income includes the following income objects: (1) proceeds from the sale of non-segregated regional assets; (2) Current account services; (3) Interest income; (4) acceptance of claims for compensation for the area; (5) receipt of commissions, deductions, or other forms as a result of sales, procurement of goods and services by the region; (6) Financial receipts from the difference in the rupiah exchange rate against foreign currencies; (7) Fine income for late execution of work; (8) Income tax penalties; (9) Income from fine levies; (10) Execution revenue on collateral; (11) Income from returns; (12) Social and public facilities; (13) Income from the provision of education and training; (14) Income from budget / sales installments.

2.3 Local Expenditure

Local expenditure is a decline in economic benefits during one accounting period in the form of outflow, asset deflation, or debt that results in a decrease in equity; it is not related to distribution to equity participants (Halim, 2007). Based on the 2005 Decree number 58 on Regional Financial Management, local expenditure is a regional government liability recognized as a deduction of net worth. Local expenditure is all local government expenditure in a budget period.

Based on the 2005 Decree number 58 which is then elaborated to 2006 Decree of the Ministry of Domestic Affairs number 13, local expenditure is classified as indirect and direct expenditure. Indirect expenditure does not have any direct relationship to program or activities while direct expenditure is closely related to program and activities. Furthermore, expenditure can be classified into staff expenditure, capital expenditure, interest expenditure, subsidy expenditure, grant expenditure, social assistance expenditure, revenue-sharing and financial assistance and incidental expenditure.

In general, regional expenditures in the APBD are grouped into five groups, namely:

1. General administration expenditure. It is the local expenditure that is not related to public activities or services including employee expenditure, goods expenditure, official travel, and maintenance expenditure.
2. Expenditures for operations, maintenance of facilities, and public infrastructure. It is local expenditure for the supply of goods and services that are directly related to public services including employee expenditure, goods expenditure, official travel, and maintenance expenditures.
3. Capital expenditure. It is regional expenditure whose benefits exceed one fiscal year and will add local assets or wealth to further increase routine expenditures such as operating and maintenance costs. Capital expenditure consists of public expenditure and apparatus expenditure.
4. Transfers expenditure. It is the transfer of money from the regional government to a third party without any hope of obtaining a refund of the benefits or profits from the transfer of the money. This expenditure group consists of repayment of loan installments, aid funds, and reserve funds.
5. Unexpected expenditure. Is an expenditure made by the local government to finance unexpected activities and extraordinary events.

Based on the 2010 Decree number 71, one sort/posting accounting standard is capital expenditure. Capital expenditure is type of expenditure from public sector budget spent to obtain fixed asset or other assets that can provide benefit for government program/activities more than twelve months. Most local government spends their budget on capital expenditure for things related to public development. Capital expenditure, according to Government Accounting Standard, includes Capital Expenditure for Land, Equipment and Machinery, Building, Road, Irrigation and Network and other physical objects. These are infrastructure local government needs. Capital expenditure is basically spent for building local infrastructure and public facilities, helping local government carrying out their tasks or for development. The higher Capital Expenditure Ratio to total local expenditure, the more impactful it is towards economic growth in an area.
2.4 Theoretical Framework and Hypothesis

Based on the literature review, the research hypotheses are:
1. Local tax has positive influence towards economic growth of Southern Sumatera;
2. Local retribution has positive influence towards economic growth of Southern Sumatera.
3. Staff expenditure has positive influence towards economic growth of Southern Sumatera;
4. Capital expenditure has positive influence towards economic growth of Southern Sumatera;

3 METHOD

3.1 Populations and Samples

The population was 5 provinces in Southern Sumatera, namely Jambi, South Sumatera, Bangka Belitung, Bengkulu, and Lampung. The sampling technique was non-probability sampling, in which all members of the population became the sample. So, the sample of this research were 5 provinces in Southern Sumatera consisting Jambi, South Sumatera, Bangka Belitung, Bengkulu, and Lampung.

3.2 Measurement of Variable

The data were secondary data in the form of panel data. The data were obtained from the National Bureau of Statistics and Directorate General of Fiscal Balance and Ministry of Finance between 2012 and 2016. The instruments were as follows:
1. Economic growth: economic growth is increase of output continuously in a long time. It is an indicator of development in a region. Economic growth is represented in percentage. Economic growth was projected with increasing percentage of GRDP of constant price in an on-going year compared to GRDP in the previous year in Southern Sumatera between 2012 and 2016.
2. Fiscal autonomy: fiscal autonomy was measured with local tax and local retribution in Southern Sumatera between 2012 and 2016. Local tax is compulsory premium derived from an individual or institution without equal direct return that can be enforced out based on applicable regulations for local government programs/activities and local development. Local retribution is local levies as payment for particular service/license granted by local government to an individual/institution.
3. Local expenditure: local expenditure was measured using staff expenditure and capital expenditure in Southern Sumatera between 2012 and 2016. Staff expenditure referred to local expenditure, of which source was the Local Budgets, for staffs. Capital expenditure was some money spent for assets or infrastructure; it was categorized as local capital in the Local Budgets.

4 RESULT AND FINDINGS

The first stage was to conduct classic assumption testing towards the model. Objective of the test was to identify whether or not the research model had met requirements of BLUE (Best Linear Unbiased Estimator). Classic assumption testing consisted of normality testing, multicollinearity testing and heteroscedasticity testing.

Kolmogorov–Smirnov test was the method of analysis used to evaluate normality of the data. Data was normally distributed when Asymp. Sig (2-tailed) score was higher than 0.05. Table 1 showed result of the Kolmogorov-Smirnov test towards the research model.

Table 1: Result of Kolmogorov-Smirnov Test towards the Model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Absolute Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>25</td>
<td>.8115207</td>
<td>.079</td>
</tr>
<tr>
<td>Normal Parameters</td>
<td>.0E-7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Most Extreme Positive</td>
<td>.079</td>
<td>- .064</td>
<td></td>
</tr>
</tbody>
</table>
Based on the normality testing towards how much influence the independent variable had towards the dependent variable. The Asymp. Sig (2-tailed) score was higher than 0.05 which indicated that the data were normally distributed.

The following procedure was multicollinearity test. The objective was to identify correlation between the independent variables. Ideally, regression model did not have multicollinearity. Multicollinearity test was conducted by identification of Tolerance and VIF scores. When tolerance score was higher than 0.1 and VIF score was lower than 10, multicollinearity occured. Table 2 showed result of the multicollinearity test.

Table 2: Collinearity Regression Model

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LT</td>
<td></td>
<td>0.122</td>
<td>3.225</td>
</tr>
<tr>
<td>2</td>
<td>LR</td>
<td></td>
<td>0.525</td>
<td>1.905</td>
</tr>
<tr>
<td>3</td>
<td>SE</td>
<td></td>
<td>0.269</td>
<td>3.722</td>
</tr>
<tr>
<td>4</td>
<td>CE</td>
<td></td>
<td>0.238</td>
<td>4.202</td>
</tr>
</tbody>
</table>

Table 2 showed that Tolerance scores of the independent variables were higher than 0.10 and their VIF scores were lower than 10. It meant that the research model did not have multicollinearity issue.

The next procedure was heteroscedasticity testing using Glejser test. Ideally, a regression model did not have heteroscedasticity. When significance of the independent variables towards their residue was higher than 0.05, heteroscedasticity did not occur. Table 3 showed result of the heteroscedasticity testing.

Table 3: Heteroscedasticity Testing

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LT</td>
<td>0.718</td>
</tr>
<tr>
<td>2</td>
<td>LR</td>
<td>0.100</td>
</tr>
<tr>
<td>3</td>
<td>SE</td>
<td>0.576</td>
</tr>
<tr>
<td>4</td>
<td>CE</td>
<td>0.364</td>
</tr>
</tbody>
</table>

Table 3 showed that the significance of the independent variables towards their residue was higher than 0.05. These are evidence that the research model did not have heteroscedasticity issue.

Having finished the classic assumption testing, the following step was multiple regression testing to identify relationship between the independent variables towards the dependent variable. Table 4 showed result of the regression testing towards the independent variables, namely local tax (PD), local retribution (RD), staff expenditure (BP), and capital expenditure (BM) towards economic growth (PE), the dependent variable.

Table 4: Result of Multiple Regression Test

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.592</td>
<td>.000</td>
</tr>
<tr>
<td>LT</td>
<td>-0.328</td>
<td>0.671</td>
</tr>
<tr>
<td>LR</td>
<td>1.983</td>
<td>0.013</td>
</tr>
<tr>
<td>SE</td>
<td>1.653</td>
<td>0.482</td>
</tr>
<tr>
<td>CE</td>
<td>1.208</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Based on Table 4, structural equation of the research model was as follows:

\[ EG = 4.592 - 0.328 \text{LT} + 1.983 \text{LR} + 1.653 \text{SE} + 1.208 \text{CE} + \varepsilon \]

In which:
- \( EG \) : Economic growth
- \( LT \) : Local Tax
- \( LR \) : Local Retribution
- \( SE \) : Staff Expenditure
- \( CE \) : Capital Expenditure
- \( \varepsilon \) : Error term

5 CONCLUSION

Finding of this study showed that:
1. Hypothesis was rejected. Local tax has negative and non-significant influence towards the economic growth in Southern Sumatera. The beta score is -0.328 (negative) and the significance is 0.671 or higher than 0.05. The local government inability to meet the targeted LT is the reason why the influence of LT is not significant.
2. Hypothesis 2 is accepted. Local retribution has positive and significant influence towards the economic growth in Southern Sumatera. The beta score is 1.983 (positive) and the significance is 0.013 or lower than 0.05. The significant influence means that the local retribution has met the target and is able to support the economic growth in Southern Sumatera. It is in line with previous studies conducted by Barimbing & Karmini (2015); Priambodo (2014) and Tahar & Zakhiya (2011).

3. Hypothesis 3 is partially accepted. Staff expenditure has positive but non-significant influence towards the economic growth in Southern Sumatera. The beta score is 1.653 (positive) and the significance is 0.482 or higher than 0.05. Staff expenditure has not been able to encourage the economic growth in Southern Sumatera and that is the reason why the influence of SE is not significant.

4. Hypothesis is accepted. Capital expenditure has positive and significant influence towards the economic growth in Southern Sumatera. The beta score is 1.208 (positive) and he significance is 0.012 or lower than 0.05. The significant influence is the result of effective allocation of capital expenditure so that it supports the economic growth in Southern Sumatera. The finding supports previous studies conducted by Hamsinah, Mursinto, Soekarnoto (2014); Wu, Tang, Lin (2010) and Zahari (2017).

Future researchers interested in investigating factors that influence economic growth can use the finding of this study as reference. Limitation of this study is the number of variables and provinces that become analysis units. It is expected that future researchers involve more independent variables and more regions as the analysis unit.

REFERENCES


