The Effect of Local Government Expenditures on Agriculture and Non-Agricultural Sectors toward Job Opportunities, Outputs and Poverty in Southeast Sulawesi Province, Indonesia

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Abstract: The government has greater financial resources than the private, so the government spending on the economy is relatively bigger than private investment. Therefore, to achieve the objectives of economic development effectively, the determination of government spending is needed to carry out appropriately according to the regional potential. In Southeast Sulawesi Province, Indonesia, the government spending on the agricultural sector is about 5.77 percent from the total expenditure. The goal of this study is to determine the effect of regional government spending on the agricultural and non-agricultural sectors toward the employment opportunities, output and poverty. This study uses an econometric model with simultaneous system equations to estimate the time series data from 2003-2015 period. The estimation results show that the increase in regional government spending does not significantly increase the labors absorption and output value, and reduce the number of poverty.

Keywords: Local government spending, employment opportunities, output, poverty.

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I. Introduction

After the implementatation of fiscal desentralization in Indonesia, the local government has greater authority to manage the budget of regional development based on the regional proper need. In other words, the local government allocates the proper budget with the priority scale to achieve the target development that has been decided.

The economy of a country or regional economy is divided into the agricultural sectors, collection excavation or mining, industry and services. They have important role in the economic development that is shown by their relative contribution of each sector to Domestic Bruto Product (PDB) or Domestik Regional Bruto Product (PDRB). The development must be undertaken for all economic sectors. However, the government must be considering the resource restriction and the achievement of economic development goals, it is necessary to prioritize a particular sector.

Southeast Sulawesi Province, as reported data in the Directorate General of Fiscal Balance (DJPK) in 1999-2011, had allocated the regional government spending on about Rp. 3,340,871,438 million per year, with the annual average increase of 27.35 percent. From the total government expenditure, it is allocated for direct expenditure related to programs and activities, it is relatively small, on average only around 31.89 percent per year while 68.11 percent is allocated for indirect expenditure. Whereas, the government spending on the agricultural sector is about 5.77 percent of total expenditure.

Based on the description, the arises question is: does the Regional Government in Southeast Sulawesi Province need to increase or decrease the proportion of public expenditure (government expenditure) in the agricultural sector to be more effective to achieve economic development goals. Thus, this study aims to determine the influence of regional government spending on the agricultural and non-agricultural sectors on employment opportunities, economic growth, and poverty in Southeast Sulawesi Province, Indonesia.

II. Theoretical Review

Regional Government Expenditures (Spending)

The local government spending is used to fund the implementation of regional government affairs which are the authority of the province and district / city consisting of the compulsory affairs and the election matters. The regional revenue is the all receipts of money through regional general cash accounts that increase equity funds, it is regional rights within one year fiscal and does not need to be repaid by the regions (Minister of Home Affairs Regulation Number 22 of 2011).
One of the interpretations of Wagner’s law is that the increasing of economic activity will cause an increase in the government spending (Liu, Hsu, and Younis, 2008). Based on this opinion, the amount of regional government expenditure is determined by regional economic activity, or in this case the PDRB. In addition to economic activities, the amount of regional government expenditure is also determined by the area and population. The wider area and the greater population cause the greater fiscal or regional expenditure needs. So, the regional government expenditure in this study can be written as follow;

\[ G = f (PDRB, LW, POP) \]  \hspace{1cm} \text{(1)}

**Notes :**

- \( G \) = the regional government expenditure
- \( PDRB \) = the gross of regional domestic product
- \( LW \) = the area
- \( POP \) = the population

**Employment Opportunity**

The labors absorption or the employment opportunities or the labors demand is defined as the number of people working in various economic sectors, such as agriculture, mining, industry, services and other sectors. The labors demand is a derived demand which means that the demand for labors by a company depends on consumer demand for the product produced by the company. The increased demand for labors depends on the earned income by the company from the sale of output produced by the worker (Bellante, 1990). Theoretically, the increasing of economic growth will increase the employment by assuming an increase in investment. In addition, if the government spending for capital expenditure increases, it also requires an increasingly of large workers. In this study, the opportunities in an area are determined by several factors, which they can be formulated mathematically as follows:

\[ TK = f (INV, W, G) \]  \hspace{1cm} \text{(2)}

**Notes:**

- \( TK \) = the amount of active workers
- \( INV \) = the amount of investment
- \( W \) = the labors wages
- \( G \) = the regional government expenditure

**The Output or The Gross Regional Domestic Product**

The common concept to describe regional income is the gross regional domestic product (PDRB), namely gross value added (output reduces intermediate cost) of all economic sectors in an area. At the national level, the economic growth is measured from the rate of the Gross Domestic Product (PDB) value and for the region is the rate of Gross Regional Domestic Product (PDRB) value which a basic measure of the economic performance in producing the goods and services. The PDRB value of a region is the sum of PDRB from several economic sectors in the area. These economic sectors include agriculture, mining and quarrying, processing industries, electricity gas and water supply, construction and building, hotel and restaurant, transportation and telecommunications, banks and other financial services, and other services.

In terms of aggregate supply, the regional economic growth is based on the aggregate of production function approach which is a function of technology, capital (physical and financial capital) and labors (Dornbusch and Fischer, 1989). According to the new / endogenous growth theory (Todaro, 2000), the output growth is influenced by technology, capital and human capital that merge with science. Here, this relation can be formulated as follows:

\[ Y(t) = T(t) K(t) L(t) \]  \hspace{1cm} \text{(3)}

**Notes:**

- \( Y \) = the regional output level (Gross Regional Domestic Product)
- \( T \) = the technology level
- \( K \) = the capital or physical and financial capital
- \( L \) = the human capital and the mastered knowledge

**Poverty**

According to Simon Kuznets, the relationship between the economic growth and the income distribution can be illustrated by an inverted U curve. In the early stages of the economic growth, the income distribution tends to deteriorate but in the later stages it will improve in line with economic growth (Todaro, 2000). Meanwhile Bourguinon (2004) states that poverty can be reduced not only by increasing the economic growth but also by improving the income distribution.
The Effect of Local Government Expenditures on Agriculture and Non-Agricultural Sectors...

The growth of agricultural sector has a special ability to reduce the poverty in all types of countries. The cross-country estimation shows that the agricultural-led of PDB growth is at least twice more effective to reduce the poverty than the PDB growth led by the non-agricultural sector (World Bank, 2008).

Based on those description, the statement can be assumed that if the public sector (government) provides an injection in the agricultural sector, by increasing government spending, it is expected to reduce poverty through the increasing of economic growth and improve income distribution at the same time. To describe the link between government spending and poverty, the formula is written as follows:

\[
JPM = f(\text{PE}) \quad \text{…………………………………………………………………………… (4)}
\]

Notes :

\[
JPM : \text{the number of poor}
\]

\[
PE : \text{the economic growth}
\]

III. Methodology

The Types and Data Sources

This study uses time series data which includes: the regional government spending, the employment opportunities, output, and poverty in Southeast Sulawesi Province during 2003 to 2014. The data from 2003 to 2014 are used as the basis that the format of the Regional Budget (APBD) in accordance with the implementation of fiscal decentralization in Indonesia was begun in 2003 after the Minister of Home Affairs Decree No. 29 of 2002, and the data availability when the data collection was carried out, as the data in 2011. Data sources: The Central Bureau of Statistics, The Director General of Financial Balance Ministry of Finance, Coordinating Board Capital investment. The data on regional government expenditure are the accumulation of the district realization, the city and provincial government expenditure budget.

The Identification and Estimation Model

To answer the problem of study, an econometric model approach with simultaneous system equations is used in this section. The simultaneous system equation is used because of the two-way relationship between endogenous variables. An econometric model with simultaneous system equations is used as a model development applied in previous studies. Kim and Cayer (1997) examine the changes on government spending in Korea with an economic model approach, a single equation; Ahmed and Miller (2000) examine the disaggregation of the government spending and private investment by using an economic model with a single equation. Meanwhile, Wang (2005) uses cointegration and error-correction to estimate the Canadian government’s spending relationship with private investment. Jiranyakul and Brahmasrene (2007) use granger causality tests and OLS to determine the relationship between government spending and economic growth in India; Liu, Hsu, and Younis (2008) estimate the relationship of the government expenditure with the economic growth in the USA by using granger causality test; and the World Bank (2009) conducts a study of the relationship on public expenditure to the agricultural sector and PDB growth in the agricultural sector in Indonesia by using an econometric model approach, a single equation. The models specified are as follow:

1. \( BLA = a_0 + a_1 LATS + a_2 LATP + a_3 JTB + a_4 TREV + a_5 LBLA + u_i \)
2. \( BLNA = b_0 + b_1 POP + b_2 TREV + b_3 LBLNA + u_i \)
3. \( TKA = c_0 + c_1 INVA + c_2 UTKAR + c_3 BLA + c_4 STK + c_5 LTKA + u_i \)
4. \( TKNA = d_0 + d_1 INVNA + d_2 RUTKR + d_3 BLNA + d_4 STK + d_5 LTKNA + u_i \)
5. \( PDRBA = e_0 + e_1 INVA + e_2 BLA + e_3 TKA + e_4 JTB + e_5 LATS + e_6 LATP + e_7 JPM + u_i \)
6. \( PDBRBA = f_0 + f_1 INVNA + f_2 JTB + f_3 BLNA + f_4 LPDRBNA + u_i \)
7. \( JPM = g_0 + g_1 PDRBA + g_2 PDBRBA + g_3 JGUR + g_4 POP + g_5 LPDPM + u_i \)

Notes :

\[
BLA : \text{the direct expenditure for the real agricultural sector (IDR billion), BLNA : the direct expenditure for the real non-agricultural sector (IDR billion), TREV : the total revenue of the real regional government (IDR billion), JTB : the number of large livestock (thousand), LATS : the extent of plant area in one season (thousand hectares), LATP : the extent of plantation area (thousand hectares), LBLA : the direct expenditure for the real non-agricultural sector year t-1 (IDR billion), POP : population (million people), LBLNA : the direct expenditure for the real non-agricultural sector in year t-1 (Rp billion), u : error component, TKA : the number of labors in the agricultural sector (thousand people), TKNA : the number of labors in the non-agricultural sector (thousand people), INVA : the private investment in the real agricultural sector (IDR billion), UTKAR : the real agricultural sector labors wages (IDR thousand / month), STK : the number of labors offers (thousand people), LTKA : the number of workers in the agricultural sector t-1 (thousand people), INVNA : the private investment in the real non-agricultural sector (IDR billion), RUTKR : the real average of labors wages (IDR thousand / month), LTKNA : the number of workers in the non-agricultural sector t-1 (thousand people), PDRBA : the real PDB in the agricultural sector (Rp billion), PDBRBA : PDB in the real non-agricultural sector (IDR billion), LPDRBRA = Real PDRB of agricultural sector t-1 (IDR billion), LPDRBNA = ...
PDB of the real non-agricultural sector t-1 (IDR billion), JPM = number of poor people (thousand people), JGUR = number of unemployed (thousand people), LJPM = number poor people t-1 (thousand people).

IV. Result and Discussion

The Regional Government Expenditure

1. The Local Government Expenditure for Agriculture Sector

The estimation results (Table 1) which show that annual crop area, plantation area, the large number of livestock and total government revenue or income have a positive and insignificant effect on government spending for the agricultural sector, it means that the regional government in Southeast Sulawesi does not give priority in the agricultural sector in its economic development program so far. In other words, the agricultural sector is not the focus of economic development programs in Southeast Sulawesi Province. Because if the local government is committed to building the agricultural sector, the amount of area of annual crops and smallholder plantations will be larger, as well as the higher government gets the revenue, so the greater regional government spends on the agricultural sector.

In addition, it is also an indicator that the regional government spending on the agricultural sector is less based on the sector's development needs. Other evidences to corroborate this statement is that the previous year's regional government expenditure variables for the agricultural sector which have a negative effect, although it is not significant. This shows that periodically the regional government spending on the agricultural sector tends to decline.

Table 1. The Results of Estimation Parameter and Elasticity of Structural Equation Variables for Local Government Expenditures, 2003 – 2015

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter</th>
<th>t-hit</th>
<th>Prob. t</th>
<th>Elasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elasticity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Local Government Expenditure in Agricultural Sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Intercept</td>
<td>-0.2653</td>
<td>-0.18</td>
<td>0.8632</td>
<td></td>
</tr>
<tr>
<td>2. The extent of seasonal crops area</td>
<td>0.78410</td>
<td>1.19</td>
<td>0.2797</td>
<td>2.0846</td>
</tr>
<tr>
<td>3. The extent of plantation area</td>
<td>0.889274</td>
<td>1.21</td>
<td>0.2729</td>
<td>2.8769</td>
</tr>
<tr>
<td>4. The number of big livestock</td>
<td>0.086223</td>
<td>0.12</td>
<td>0.9077</td>
<td>0.1403</td>
</tr>
<tr>
<td>5. The real total of regional income</td>
<td>0.031832</td>
<td>0.88</td>
<td>0.4115</td>
<td>0.5335</td>
</tr>
<tr>
<td>6. The real spending for agricultural sector t-1</td>
<td>-0.13610</td>
<td>-0.32</td>
<td>0.7623</td>
<td></td>
</tr>
</tbody>
</table>

Durbin-Watson 1.916134
R-Square 0.90438

The Regional Government Expenditure in non-Agricultural Sector

1. Intercept -5.257.25 -4.22 0.0029
2. Population 2760.280 3.89 0.0046 6.7596 5.4681
3. The real total regional income 0.129811 1.08 0.3106 0.3733 0.3019
4. The real government spending on non-agricultural sector t-1 -0.23619 -1.03 0.3236

Durbin-Watson 2.314551
R-Square 0.97631

The average proportion of regional government spending in Southeast Sulawesi Province for the agricultural sector to total expenditure is relatively small (around 5.96 percent), this is different from some countries that have undergone transformation, when agriculture is still making a large contribution to their PDB, spending the public sector of agriculture in these countries was around 10 percent of total public expenditure in 1980 (World Bank, 2008).

2. The Regional Government Expenditures for Non-Agricultural Sector

The population influence on the local government spending on the non-agricultural sector is positive and significant. Through this statement is suspected that this is due to local government policies that focus on the availability of public facilities (which are unproductive) so when the population increases, the local government expenditure allocation for the non-agricultural sector also increases.

The total variables of the local government revenues and government expenditure for the non-agricultural sector in the previous year which had a positive and insignificant effect show that the government spending on the non-agricultural sector is not dependent on the government revenue and its determination is not based on the regional needs.

Employment Opportunity

1. Labors Absorption in Agricultural Sector

The expected result that the increase in private investment can in the agricultural sector, it will increase the labors absorption, but the estimation results indicate that the investment in the agricultural sector has a negative and insignificant effect on the employment (Table 2). This is presumably because the investment in the...
agricultural sector recorded in this study is a large-scale investment in the form of estate so that it is not labors intensive (according to Priyarsono's results study, 2011).

As said in the law of demand, when the price rises, the number of goods or services requested will drop. As well as for the labors, when the wages rise, the demand for labors will decrease so that the wages negatively affect the labors absorption. But the estimation results show that the wages have a negative and insignificant effect on employment in the agricultural sector. It is suspected that this is due to the intensification and extensification of the agricultural sector which requires more labors.

**Table 2. The Results of Parameter Estimation and Variable Elasticity of Structural Equations of Job Opportunities, 2003 – 2015**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter (1)</th>
<th>t-hit (2)</th>
<th>Prob. t (3)</th>
<th>Short term (4)</th>
<th>Elasticity (5)</th>
<th>Long term (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The labors absorption in agricultural sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Intercept</td>
<td>291.0414</td>
<td>0.78</td>
<td>0.4630</td>
<td>-0.0049</td>
<td>-0.0121</td>
<td></td>
</tr>
<tr>
<td>2. The real investment on agricultural sector</td>
<td>-1.30609</td>
<td>-0.20</td>
<td>0.8488</td>
<td>-0.0183</td>
<td>-0.1049</td>
<td></td>
</tr>
<tr>
<td>3. The real wages of agricultural labors</td>
<td>-0.05389</td>
<td>-0.31</td>
<td>0.7649</td>
<td>-0.0776</td>
<td>-0.1906</td>
<td></td>
</tr>
<tr>
<td>4. The real expenditure of agricultural sector</td>
<td>-0.15309</td>
<td>-0.41</td>
<td>0.6985</td>
<td>-0.0480</td>
<td>-0.1179</td>
<td></td>
</tr>
<tr>
<td>5. The number of labors offers</td>
<td>-0.03804</td>
<td>-0.11</td>
<td>0.9170</td>
<td>-0.0784</td>
<td>-0.1925</td>
<td></td>
</tr>
<tr>
<td>6. The number of labors in agricultural sector</td>
<td>0.592636</td>
<td>1.63</td>
<td>0.1547</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Darwin-Watson: 1.813569 F-count: 3.76
R-Square: 0.75816 Prob>F: 0.0688

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter (1)</th>
<th>t-hit (2)</th>
<th>Prob. t (3)</th>
<th>Short term (4)</th>
<th>Elasticity (5)</th>
<th>Long term (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The labors absorption in non agricultural sector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Intercept</td>
<td>-443.592</td>
<td>-2.26</td>
<td>0.0644</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The real sector investment on non pertanian agriculture</td>
<td>0.018607</td>
<td>1.66</td>
<td>0.1489</td>
<td>0.0069</td>
<td>0.0183</td>
<td></td>
</tr>
<tr>
<td>3. The wages average of the labors</td>
<td>0.104965</td>
<td>1.75</td>
<td>0.1300</td>
<td>0.2893</td>
<td>0.7653</td>
<td></td>
</tr>
<tr>
<td>4. The real expenditure for non-agriculture</td>
<td>-0.031999</td>
<td>-0.80</td>
<td>0.4542</td>
<td>-0.0628</td>
<td>-0.1661</td>
<td></td>
</tr>
<tr>
<td>5. The number of labors offers</td>
<td>0.530638</td>
<td>2.43</td>
<td>0.0511</td>
<td>1.1743</td>
<td>3.1061</td>
<td></td>
</tr>
<tr>
<td>6. The number of labors in non agriculture</td>
<td>0.621947</td>
<td>3.43</td>
<td>0.0139</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Darwin-Watson: 2.220156 F-count: 162.94
R-Square: 0.99269 Prob>F: <.0001

The regional government spending on the agricultural sector shows a negative relation but insignificant effects on the employment in the agricultural sector. The estimation results are not in accordance with the results of a World Bank (2009) and Budiyanto et al (2015) study which is concluded that, except for the private input subsidies, the government spending on the agricultural sector had a positive impact on the output growth and employment in Indonesia.

The greater population, the greater availability of labors is available. Meanwhile, currently the economic sector that can accommodate more workers is the agricultural sector so that the number of labors supply should have a positive influence on employment in the agricultural sector. Estimation results show that the amount of labors supply has a negative effect on employment in the agricultural sector, although it is not significant. This is presumably because in the Southeast Sulawesi Province there has been a growing economic activity in the non-agricultural sector that can accommodate an increase in the number of workers due to the increase in labors supply.

Besides, the estimation results which show that the variables of agricultural sector investment, regional government spending on the agricultural sector, and labors supply negatively affect the employment of the agricultural sector. Other evidence can be used to conclude that in Southeast Sulawesi Province, there has been an economic transformation structural is the tendency of agricultural sector employment data which continues to decline from year to year.

2. **The Absorption of Labors in the Non-Agricultural Sector**

The non-agricultural sector investment has a positive influence but there is no insignificant effects on employment because it is assumed that the investment activities are capital intensive. Whereas, the average wage of workers has a positive and significant effect on the labors absorption in the non-agricultural sector because in Southeast Sulawesi Province has developed economic activities in the non-agricultural sector.

The local government spending on the non-agricultural sector has a negative and insignificant effect on the employment of the non-agricultural sector, presumably the composition and amount of the government expenditure are not appropriate. In other hand, the amount of labors supply has a positive and significant effect on the absorption of labors in the non-agricultural sector shows that in Southeast Sulawesi Province there has been a structural economic transformation, from agriculture to non-agriculture.
Output or Gross Regional Domestic Product (GRDP)

1. The Output Value of Agricultural Sector

Table 3 shows that agricultural sector investment and regional government spending on the agricultural sector have a positive and negative effect but they are not significant on the output value of the agricultural sector. This shows that capital productivity in the agricultural sector business is decreasing. This decreasing is suspected that the cause is the inappropriate allocation of capital inputs in agricultural business.

The laborabs has a negative effect, although it is not significant to the output value of the agricultural sector showing in the agricultural sector that there has been a disguised unemployment when the number of workers in the sector is reduced, the output value of the agricultural sector continues to increase. While the number of large livestock and seasonall crop area also affect positively and negatively but they do not affect significantly to the output value of the agricultural sector showing the decreasing input productivity. Declining productivity of these inputs can be due to unfavorable climatic factors or improper technological factors.

Table 3. The Results of Parameter Estimation and Elasticity of Variables in the Structural Equation of Output Behavior, 2003 – 2015

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Parameter (1)</th>
<th>t-stat (2)</th>
<th>Prob. t (3)</th>
<th>Elasticity (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The labors absorption in agricultural sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Intercept</td>
<td>825.6581</td>
<td>1.49</td>
<td>0.2113</td>
<td></td>
</tr>
<tr>
<td>2. The real investment in agricultural sector</td>
<td>8.983947</td>
<td>0.82</td>
<td>0.4573</td>
<td>0.0046</td>
</tr>
<tr>
<td>3. The real expenditure in Agricultural sector</td>
<td>-1.68005</td>
<td>-1.66</td>
<td>0.1728</td>
<td>-0.0724</td>
</tr>
<tr>
<td>4. The number of labors in agriculture sector</td>
<td>-1.13871</td>
<td>-1.88</td>
<td>0.1339</td>
<td>-0.1565</td>
</tr>
<tr>
<td>5. The number of livestock</td>
<td>0.262163</td>
<td>0.20</td>
<td>0.8508</td>
<td>0.0184</td>
</tr>
<tr>
<td>6. The extent of seasonal crops area</td>
<td>-2.37540</td>
<td>-1.50</td>
<td>0.2627</td>
<td>-0.2723</td>
</tr>
<tr>
<td>7. The extent of plantation area</td>
<td>4.578245</td>
<td>2.43</td>
<td>0.0716</td>
<td>0.6386</td>
</tr>
<tr>
<td>8. The real output value of agricultural sub-sector t-1</td>
<td>0.635075</td>
<td>4.19</td>
<td>0.0138</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.569533</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Square</td>
<td>0.99583</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The labors absorption in non-agricultural sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Intercept</td>
<td>-142.037</td>
<td>-0.22</td>
<td>0.8338</td>
<td></td>
</tr>
<tr>
<td>2. The real investment in non-agricultural sector</td>
<td>-0.04255</td>
<td>-0.23</td>
<td>0.8229</td>
<td>-0.0009</td>
</tr>
<tr>
<td>3. The number of non-agricultural labors</td>
<td>5.035937</td>
<td>1.97</td>
<td>0.0893</td>
<td>0.2916</td>
</tr>
<tr>
<td>4. The real expenditure of non-agricultural sector</td>
<td>0.139094</td>
<td>0.22</td>
<td>0.8295</td>
<td>0.0158</td>
</tr>
<tr>
<td>5. The real output value of agricultural sub-sector t-1</td>
<td>0.770892</td>
<td>6.23</td>
<td>0.0004</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.177105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Square</td>
<td>0.99453</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The variable of plantation area is the only variable that has a positive and significant effect on the output value of the agricultural sector. The plantation subsector is a subsector that contributes predominantly in determining the output value of the agricultural sector. Based on these findings, it is expected that the regional governments in Southeast Sulawesi can plan an appropriate economic development programs and activities to increase the land productivity, the capital and labors productivity in the agricultural sector business in the region.

2. The Output Value of Non-Agricultural Sector

The non-agricultural sector investment has a negative effect and it is not significant on the output value of the non-agricultural sector. Presumably, the non-agricultural sector investment data collected in this study is investment data with a large nominal value. Meanwhile, the investments with a small nominal value that are numerous and not recorded are actually more valid for the estimation purposes, but the data is not available.

The non-agricultural sector labors have a positive and significant effect on the output of the non-agricultural sector. This is in line with the expectation that when the input is added in a production process, the output will increase. Whereas, the regional government spending on the non-agricultural sector has a positive effect but it is not significant effect on the output of the non-agricultural sector. This is presumably that the local government spending on the non-agricultural sector is allocated more to finance unproductive (consumption) service. As stated by Barro (1990), the government spending on consumption has a negative effect, while the government spending on productive service has a positive effect on the output growth.

Poverty

The estimation results (Table 4) show that the response of the number of poor people to the output value of the agricultural sector is positive and significant, it means that the increase in the output value of the agricultural sector actually enlarge the number of poor people. This is a suspected that the increase in the output of the agricultural sector does not spread to the poor but it is only enjoyed by a small percentage of the
population who are not poor. The estimation results are not in accordance with the findings of the World Bank (2008) and Budiyanto et al (2014) who state that the agricultural sector is an instrument to reduce rural poverty. The results of this estimation are in accordance with the findings of Priyarsono (2011) in Riau Province which shows that agricultural growth is not effective in reducing poverty, presumably in the area dominated by large agricultural businesses.

**Tabel 4. Results of Parameter Estimation and Variable Elasticity of Structural Behavior of Poverty Behavior, 2003 – 2015**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Parameter</th>
<th>t-hit (1)</th>
<th>Prob. t (2)</th>
<th>Prob&gt;F (3)</th>
<th>Elastisitas Short term (4)</th>
<th>Elastisitas Long term (5)</th>
<th>Prob&gt;F (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of poor</td>
<td>Intercept</td>
<td>-4.7351</td>
<td>-0.99</td>
<td>0.3788</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The real output value of agricultural sector</td>
<td>0.235438</td>
<td>-4.14</td>
<td>0.0061</td>
<td>2.2658</td>
<td>0.2761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The real output value of non-agricultural sector</td>
<td>-0.07769</td>
<td>-2.64</td>
<td>0.0388</td>
<td>-1.5358</td>
<td>-1.5428</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. The number of unemployment</td>
<td>0.738992</td>
<td>2.31</td>
<td>0.0601</td>
<td>0.1178</td>
<td>0.1184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Population</td>
<td>213.4278</td>
<td>0.75</td>
<td>0.4791</td>
<td>1.1742</td>
<td>1.1796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. The number of poor t-1</td>
<td>0.004563</td>
<td>0.23</td>
<td>0.8252</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>2.86972</td>
<td></td>
<td></td>
<td>33.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Square</td>
<td>0.96559</td>
<td></td>
<td></td>
<td>Prob&gt;F</td>
<td></td>
<td></td>
<td>0.0003</td>
</tr>
</tbody>
</table>

Unlike the output value of the agricultural sector, the output value of the non-agricultural sector has a negative and significant impact on the number of poor people. In other words, if the non-agricultural sector output value increases, the number of poor people will decrease significantly. This is in accordance with the opinion of Priyarsono (2011) who concluded that economic growth effectively reduces poverty in Riau Province. The estimation results become an indicator that the non-agricultural sector contributes predominantly in the equitable economic development in Southeast Sulawesi Province.

The number of unemployed has a positive and significant effect on the number of poor people because the workers who are unemployed will lose their potential income. So, they will become the dependents of workers who work to fulfill their needs. Thus, the workers will lose real income, and then they will increase the number of poor people.

The population has a positive effect but it is not significant effect on the number of poor people. This condition can be interpreted that an increase in the population is an increase in the number of working-age population who can directly obtain jobs and income so that they can fulfill their needs without having to become poor.

**V. Conclusions**

1. The agricultural sector is not a main point for economic development in Southeast Sulawesi Province, this is proved by the fact that the allocation of regional government spending to the sector did not increase significantly when local government revenues increased.
2. The economy in Southeast Sulawesi Province has a structural transformation, from agriculture to non-agriculture.
3. The agricultural sector in Southeast Sulawesi Province occurs disguised unemployment.
4. The increased regional government spending on the agricultural and non-agricultural sectors in Southeast Sulawesi Province does not significantly increase labors absorption and output value, and reduce the number of poor people. Thus, it is necessary to find the right amount and composition as well as the program so the regional government spending can have a significant impact in achieving development goals.

**References**


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