The Leading Economic Sectors Analysis of Ogan Komering Ulu Selatan District, South Sumatera Province in 2010-2015

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Abstract

OKU Selatan District has many economic potentials, but it is not optimally improved and the growth is relatively slow. The objectives of this study are to analyze the GDRP movement during 2010 to 2015, to analyze the basis sectors, to analyze the sectors that can rapidly growth and have a good competitiveness, and also to analyze the prioritized economy sectors that can improve the region.

The methods of this study are LQ, shift share, and overlay analysis. During 2010-2015, there are 8 basis sectors and 9 non-basis sectors. The results of Shift share analysis showed that 1) electricity and gas sector, 2) wholesale and retail trade, cars and motorcycle reparation sector, 3) transportation and warehouse sector, 4) accommodation and food supply sector, 5) information and communication sector, 6) financial service and insurance sector, 7) real estate sector, and 8) educational services sector are stayed in quadrant I during period 2010-2015. It means that those sectors have the rapid growth and also good competitiveness sectors. Overlay analysis showed that 1) wholesale and retail trade sector, cars and motorcycle reparation sector, 2) real estate sector, 3) educational services sector as the priority sectors are needed to improve economic growth.

Keywords: GRDP, Location Quotient (LQ), shift share, Ogan Komering Ulu Selatan.

1. Introduction

1.1. Research background

Economic development in a region can be marked by the harmony between economic growth and equitable distribution of income. In the era of regional autonomy, the development potential of leading sectors is needed to boost local revenue in order
to increase the economic growth and equitable distribution of income of local communities. Ogan Komering Ulu Selatan is one of the expansion districts in Indonesia, with the area of the district parent before that is district Ogan Komering Ulu (OKU) which is its capital city at Baturaja. The regional growth and development is the attempt to create public welfare. This is intended to utilize the results of the development in the region for all citizens of OKU Selatan district as a form of welfare improvement in physical and spiritual fair and equitable manner. [3] Economic development is a process of the cooperation between local governments and communities to manage existing resources and establish a partnership between local governments and the private sector to create new jobs as mandated in the ideals of regional autonomy.

OKU Selatan District regional development is an integral part of national development. [18] There is a change to the order in the delivery of government requires local governments to prioritize the implementation of regional autonomy that is the aspect of democracy, justice, equality, and the potential development of the leading sectors in their regions.

The leading economic sector in OKU Selatan District in the plantation sub-sector is quite large. It is seen from the annual contribution of plantation sub-sector which dominates 13.19 percent compared to other sub-sectors, and it is characterized by the conditions that allow for the utilization of agricultural land throughout the year, the gardens, the woods and the yields are very rich. All the raw natural materials which can be utilized through a good planning will be able to lift OKU Selatan district into a prosperous and self-sufficient district in terms of food security. OKU Selatan District has the lush and abundant natural resources, such as durian, mango, rambutan, duku, mangosteen, and bananas. In the harvest season, the yields can be exported to the outside of OKU Selatan District area.

Based on Figure 1. The sector of agriculture, forestry, and fisheries provide the biggest contribution in the GDP formation of OKU Selatan district, which is 40.19 percent in 2010 until 2015.

The economic sector of OKU Selatan district is quite dominant in agriculture, forestry, and fishing, but the dominance is not able to boost the GDP growth rate during 2010-2015. GDP growth rate of OKU Selatan district is slower when compared to OKU Timur district which equally begins to develop as a district division. OKU Timur district is a part of the expansion of OKU district, formed at the same time as OKU Selatan district. The development of OKU Timur is faster than OKU Selatan. It is seen in the GDP growth rate which is presented in Table 1. GDP growth rate of OKU Selatan in 2015 has decreased up to 4.54 percent. This can be seen in the following table.
Figure 1: Gross Regional Domestic Product of OKU Selatan District in 2010-2015. Source: Central Bureau of Statistics (processed).

The slow development in OKU Selatan can be seen also on the indicators of human development index (HDI), which is the indicator of human development achievements based on a number of basic components of quality of life, such as health, education, and economic prosperity.

If it is compared to HDI achievement in OKU Selatan and South Sumatera, The HDI of OKU Selatan is always lower than South Sumatera. It can be seen in Figure 2. Basically, the provincial HDI is also affected by the district/ city. HDI of districts/ municipalities contributes to the magnitude of the provincial HDI. Economic development of a region not only see how big the economic growth of a region growing but also pay attention to the problems of poverty and the scale of existing poverty, the burden and poverty alleviation challenges faced by the government of OKU Selatan which are not easy. The descriptions of the condition of poverty are shown in Figure 3.

Figure 3 shows that the achievement percentage of the poor in OKU Selatan is not always in line with the set targets. This means that the government has not been very successful in achieving the target level of poverty in accordance with
RPJMD (Regional Medium-Term Development Plan). Although in 2012 the percentage of poor achievement once below the target, but in the next year there is a gap between the poverty targets set to the real conditions. The gap widened in 2015 when compared to 2014. In 2015, the target percentage of the poor in OKU Selatan based on RPJMD 2010 to 2015 amounts to 8.86 percent but in reality, poor people was at 11.58 percent. The construction planning which is more directed to prioritize the leading
economic sector in a region is expected to increase the economic growth that takes into account aspects of income distribution, poverty reduction and improvement of the Human Development Index.

One of the long-term regional economic development targets is the shift in the economic structure of the region caused by the progress of development. Not all the sectors of the economy have the ability to grow, then a good regional development planning that would normally utilize sectors are able to have a competitive basis so as to encourage economic development in a region.

1.2. Problem outline

In the era of regional autonomy, a new paradigm in regional development, development success is not only measured by physical progress but also concerned with the economic sector, seeded and the potential for development. Determination of leading economic sector is indispensable in order to spur economic growth in the region. A useful method for assessing and projecting the economic growth of the region considers the growth of leading economic sector. The increasing in development achievements and economic growth that comes from local resources will be utilized by the public. Leading economic sector is expected to influence other sectors to more advanced and developed so that the shift of the economic sector can be stepped up simultaneously. The Increasing in economic development are expected to reduce poverty and to improve the Human Development Index (HDI). This is a problem that needs to be examined by all components of society and government for the sustainable development of OKU Selatan District. Based on these problems, some questions arise, including:

1. How the describing of the GRDP ADHK of OKU Selatan District during the last 6 years (2010-2015)?

2. Which basis sectors are able to boost economic growth in OKU Selatan District during the 2010-2015 period and how the multiplier economic base effects affect the GRDP total in those periods?

3. Which of the potential economic sectors can be prioritized for the development of OKU Selatan District in 2010-2015?

2. Research Methods
2.1. Data

The data used in this research is secondary data obtained through library research and record the theories of literature books, journals relating to the problems examined. While the source of the data is obtained from the government vertical institutions, such as the Central Bureau of Statistics OKU Selatan, South Sumatra Province, as well as other agencies concerned.

2.2. Methods

2.2.1. Descriptive analysis

Descriptive analysis is used to analyze the development of the GRDP ADHK of OKU Selatan District during the last 6 years (2010-2015).

2.2.2. Location quotient analysis (LQ)

LQ analysis method compares the magnitude of the role of economic sectors in a region (district) to the role of the sector at provincial level. LQ calculation uses the following formula:

\[
LQ_i = \frac{\frac{S_{ib}}{S_b}}{\frac{S_{ia}}{S_a}}
\]

which:

\(LQ\): Location Quotient value

\(S_{ib}\): GRDP value of sector i in OKU Selatan District

\(S_b\): Total GRDP value of all sectors in OKU Selatan District

\(S_{ia}\): GRDP value of sector i at provincial level (South Sumatara)

\(S_a\): Total GRDP value of all sectors at provincial level (South Sumatara)

If the result of the calculation using the above formula produces a value \(LQ > 1\) then the sector i categorized as a sector basis. LQ value of more than 1 indicates that the share of production in the OKU Selatan is larger than the areas in South Sumatra and output in the sector i is oriented to export to the outside of OKU Selatan. Conversely, if the value of \(LQ < 1\) then the sector is identified as the non- basis. Meanwhile, if the value of \(LQ = 1\), then there is a tendency that the sector is closed because no transaction to and from outside the region, but these conditions are hard to find in a regional economy.
2.2.3. Shift share analysis

Shift share analysis discusses how to identify growth sectors as well as the competitiveness of each sector in a region at the second point of time desired.

The Steps on *Shift Share Analysis*

1. Determine the indicators of economic activity (such as production, income, value added, employment and so on); determine the base year analysis and year-end analysis.

2. Determine the economic sector to be analyzed. For example, only certain economic sectors (e.g. agriculture), based on groups of economic sectors (primary sector groups, industry, utilities, and services), by all sectors of the economy and so on.

3. Calculate the change of indicator of economic activity (GRDP) of sector i in region j.

In the shift share analysis, if in a country there are m area / region / province (j = 1, 2, 3... m) and n economic sectors (i = 1, 2, 3... n).

1. income (province) of sector i in the base year analysis.

\[ Y_i = \sum_{j=1}^{m} Y_{ij} \]  \hspace{1cm} (2)

\( Y_i \) = income (province) of sector i in the base year analysis.

\( Y_{ij} \) = income sector i in region j in the base year analysis

2. income (province) of sector i in the base year analysis.

\[ Y'_i = \sum_{j=1}^{m} Y'_{ij} \]  \hspace{1cm} (3)

\( Y'_i \) = income of sector i for the base year analysis

\( Y'_{ij} \) = income of sector i in region j in the end year analysis

While total income (province) in the base year and end year analysis of the analysis formulated as follows:

[DOI: 10.18502/kss.v3i10.3142]
3. Income (province) in the base year analysis

\[ Y_{..} = \sum_{i=1}^{n} \sum_{j=1}^{m} Y_{ij} \]  

(4)

\[ Y_{..} = \text{income (province) in the base year analysis} \]

\[ Y_{ij} = \text{production of sector } i \text{ in region } j \text{ in the base year analysis} \]

4. Income (province) in the end year analysis

\[ Y'_{..} = \sum_{i=1}^{n} \sum_{j=1}^{m} Y'_{ij} \]  

(5)

\[ Y'_{..} = \text{income (province) in the end year analysis} \]

\[ Y'_{ij} = \text{income of sector } i \text{ in region } j \text{ in the end year analysis} \]

Changes in income sector i in region j can be formulated as follows:

\[ \Delta Y_{ij} = Y'_{ij} - Y_{ij} \]  

(6)

\[ \Delta Y_{ij} = \text{changes in income sector } i \text{ in region } j \]

\[ Y_{ij} = \text{income of sector } i \text{ in region } j \text{ in the base year analysis} \]

\[ Y'_{ij} = \text{income of sector } i \text{ in region } j \text{ in the end year analysis} \]

Changes in GRDP are as follows:

\[ \% \Delta Y_{ij} = \left(\frac{Y'_{ij} - Y_{ij}}{Y_{ij}}\right) \times 100\% \]  

(7)

5. Calculate the ratio of economy activity indicators (income)

The income ratio is used to compare the economic sector revenue in a given region. The income ratio is divided into ri, Ri and Ra.

a. ri

\[ ri = \frac{Y'_{ij} - Y_{ij}}{Y_{ij}} \]  

(8)

which:

\[ Y_{ij} = \text{income of sector } i \text{ in region } j \text{ in the base year analysis} \]

\[ Y'_{ij} = \text{income of sector } i \text{ in region } j \text{ in the end year analysis} \]

b. Ri

\[ Ri = \frac{Y'_{i.} - Y_{i.}}{Y_{i.}} \]  

(9)

which:
Y'\textsubscript{i}. = income (province) of sector in the base year analysis  
Y\textsubscript{i}. = income (province) of sector i in the end year analysis  
c. Ra

\[ Ra = \frac{Y' - Y}{Y} \]  
which:

Y'.. = income (province) in the end year analysis  
Y.. = income (province) in the end year analysis

6. Calculate the components of growth in the region

Components of growth in the region consist of the components of national growth (PN), the component of proportional growth (PP) and the component of share growth region (PPW).

a. PN

\[ PN_{ij} = (Ra)Y_{ij} \]  
which:

PN\textsubscript{ij} = components of national growth in sector i in region j  
Y\textsubscript{ij} = income of sector i in region j in the base year analysis  
Ra = income ratio (province)

b. PP

\[ PP_{ij} = (Ri - Ra)Y_{ij} \]  
which:

PP\textsubscript{ij} = component proportional of growth sector i in region j  
Y\textsubscript{ij} = income of sector i in region j in the base year analysis  
Ri = income ratio (province) of sector i  
Ra = income ratio (province)  
If:

PP\textsubscript{ij} < 0, shows that sector i in region j has a slow growth.  
PP\textsubscript{ij} > 0, shows that sector i in region j has a rapid growth.

c. PPW

\[ PPW_{ij} = (ri - Ri)Y_{ij} \]  
which:
PPWij = component sector share growth in sector i in region j
Yij = income of sector i for region j in the base year analysis
ri = income ratio of sector i in region j
Ri = income ratio (province) of sector i If:
PPWij > 0, means that the sector / region j has a good competitiveness compared to sectors / regions for sector i.
PPWij < 0, means the sector i in region j is unable to compete well when compared with other regions.

7. Evaluate the economy sectors growth profile

Profile of growth sectors of the economy is used to evaluate the growth sectors of the economy in the area concerned in a predetermined period of time, by way of expressing percentage change proportional growth component (PPij) and growing share of the region (PPWij). On the horizontal axis, there is a PP as abscissa, while the vertical axis are PPW as ordinate.

![Diagram of economy sector growth](image)

**Figure 4:** Profile of economy sector growth.

Description:

1. Quadrant I shows that the sectors in the area concerned have a rapid growth, as well as the region’s competitiveness in these sectors better when compared with other regions. This indicates that the sector / region concerned is a developed region.

2. Quadrant II shows that the economic sectors in the region concerned have a rapid growth, but the region’s competitiveness in these sectors compared with other areas is not good.
3. Quadrant III indicates that the economic sectors in the area concerned have a slow growth and less competitiveness when compared to other regions. It indicates that the sector/region concerned is a slow development region.

4. Quadrant IV shows that the economy sectors in the area concerned have a slow growth, but the region’s competitiveness in these sectors is good when compared with other regions.

5. There is a 45-degree line in Quadrant II and Quadrant IV and cut both Quadrants. On the top of the lines indicates that the sector/region concerned is an advanced sector/region, while in the below of the lines shows that the sector/region concerned has a slow growth.

6. Calculate the Net Shift

When the growth component and the proportional share of the region are added up, it will obtain a clean shift that can be used to identify the growth of an economy sector. The net shift in the sector $i$ in region $j$ can be formulated as follows:

$$PB_{ij} = PP_{ij} + PP_{Wij}.$$ (14)

which:

$PB_{ij} =$ net shift in sector $i$ in region $j$

$PP_{ij} =$ proportional growth component in sector $i$ in region $j$

$PP_{Wij} =$ proportional share of the region in sector $i$ in region $j$

If:

$PB_{ij} > 0$, means that the growth in sector $i$ in region $j$ includes in a rapid growth area

$PB_{ij} < 0$, means that the growth in sector $i$ in region $j$ includes in a slow growth area

2.2.4. Overlay analysis

The overlay analysis method is used to map the priority sectors by combining the results of LQ method shift with the value of proportional share growth (PP) and the value of share growth of the region (PPW). Positive notations mean coefficient of components worth more than zero, and negative if the coefficient is less than zero and LQ value is more than one. The sector that has a positive value of PP, PPW and LQ means that the sector can become a priority sector to be developed and become the leading sectors in the region. From the overlay analysis, the grouping leading sectors can be done based on the level of the excellences according to Klassen typology (Hilal Almulaibari, 2011). Table 2 presents some groups based on Klassen typology.
3. Result and Discussion

3.1. GRDP growth of OKU Selatan district in year 2010-2015

Economic Structure of OKU Selatan district is supported by 17 role sectors in the formation of GDP during the period 2010-2015. Table 3 shows the composition of each sector in GDP formation of OKU Selatan district in 2010-2015. The role of agriculture, forestry and fisheries in GDP formation of OKU Selatan district has always dominated over the years. Contribution of the agricultural sector decreased from year to year, but the other sectors such as forestry and fisheries tend to increase during 2010-2015. This shows that for 6 years, there is a shift in the sectors that contribute to the formation of GDP, but it is still dominated by agriculture, forestry, and fisheries. Then the next sectors that contribute significantly to the formation of GDP are the wholesale and retail trade, repair of cars and motorcycles which contribute as much as 19.75 percent in 2015, followed later by the construction sector by 16.70 percent in 2015.

3.2. Analysis of basis and non-basis sector

LQ analysis can be utilized to analyze the potential sectors to be exported to the other regions and the non-potential sectors to be exported which only meet the local needs in the area itself. The potential export sector is a basis sector and the sector that can only provide the needs in the region itself is called the non-basis. Table 4 presents the sectors that are the basis and non-basis sectors.

Based on Table 4, it can be seen that the sector which has the value of LQ> 1 represents a basis sector. OKU Selatan has 8 basis sectors, including: 1) Agriculture, forestry, and fishery, 2) Construction, 3) Wholesale and retail; cars and motorcycles

<table>
<thead>
<tr>
<th>Typology</th>
<th>LQ</th>
<th>PP</th>
<th>PPW</th>
<th>Leading level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Excellent</td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>Very good</td>
</tr>
<tr>
<td>3</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>More than enough</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>Enough</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>Almost enough</td>
</tr>
<tr>
<td>7</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>Less</td>
</tr>
<tr>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Very Less</td>
</tr>
</tbody>
</table>

Source: Hilal Almulaibari, 2011
<table>
<thead>
<tr>
<th>Sector</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishery</td>
<td>40.19</td>
<td>39.63</td>
<td>38.84</td>
<td>38.28</td>
<td>36.57</td>
<td>34.52</td>
</tr>
<tr>
<td>Mining and excavation</td>
<td>1.76</td>
<td>1.81</td>
<td>1.88</td>
<td>1.93</td>
<td>1.95</td>
<td>1.93</td>
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<tr>
<td>Processing Industry</td>
<td>6.87</td>
<td>6.82</td>
<td>6.90</td>
<td>7.09</td>
<td>7.35</td>
<td>7.04</td>
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<tr>
<td>Gas and Electricity</td>
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<td>0.03</td>
<td>0.04</td>
<td>0.04</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Water Supply, Waste Management, Waste and Recycling</td>
<td>0.03</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Wholesale, Retail; Cars and Motorcycles Reparation</td>
<td>15.25</td>
<td>15.96</td>
<td>16.76</td>
<td>16.85</td>
<td>17.42</td>
<td>19.75</td>
</tr>
<tr>
<td>Transportation and Warehouse</td>
<td>0.66</td>
<td>0.65</td>
<td>0.68</td>
<td>0.71</td>
<td>0.78</td>
<td>0.82</td>
</tr>
<tr>
<td>Accomodation Supply; Food and Drink</td>
<td>0.64</td>
<td>0.67</td>
<td>0.69</td>
<td>0.72</td>
<td>0.78</td>
<td>0.87</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>0.34</td>
<td>0.39</td>
<td>0.43</td>
<td>0.44</td>
<td>0.48</td>
<td>0.49</td>
</tr>
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<td>Financial Service and Insurance</td>
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<td>0.88</td>
<td>0.91</td>
<td>0.96</td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td>Real Estate</td>
<td>3.89</td>
<td>4.01</td>
<td>4.19</td>
<td>4.41</td>
<td>4.57</td>
<td>4.46</td>
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<td>Company Services</td>
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<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Public administration, defense and Compulsory Social Security</td>
<td>8.37</td>
<td>7.22</td>
<td>6.47</td>
<td>6.06</td>
<td>6.15</td>
<td>5.96</td>
</tr>
<tr>
<td>Educational services</td>
<td>3.44</td>
<td>3.58</td>
<td>3.87</td>
<td>4.09</td>
<td>4.50</td>
<td>4.43</td>
</tr>
<tr>
<td>Health services and Social activities</td>
<td>1.15</td>
<td>1.13</td>
<td>1.13</td>
<td>1.13</td>
<td>1.18</td>
<td>1.20</td>
</tr>
<tr>
<td>Other services</td>
<td>1.04</td>
<td>1.04</td>
<td>0.87</td>
<td>0.81</td>
<td>0.74</td>
<td>0.72</td>
</tr>
<tr>
<td>Gross Regional Domestic Product</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics of OKU Selatan

reparations, 4) Real Estate, 5) government administration, defense and compulsory social security, 6) educational services, 7) Health Services and social Activities, and 8) other services. From 2010 to 2015, there are no changes in the position of a basis sector to non-basis sectors in each of the economic sectors forming the GDP in OKU Selatan. Otherwise, from the non-basis to the basis sector. This indicates that the condition of OKU Selatan economic structure of the basis sectors and non basis sectors tends to persist or do not change for the past 6 years, which the non-basis sector does not increase to the basis sector and vice versa. The subsectors in agriculture, forestry, and fisheries are the basis subsectors including he annual horticultural crops and others, whereas in the sector of wholesale and retail; repair of cars and motorcycles which
is a sub-sector basis, namely sub-sector wholesale and retail, instead of cars and motorcycles.

3.3. The impact of economic base model analysis

Based on the data in Appendix 5, the results of calculation of the multiplier value of economic base models are presented in Table 5. The result shows that if there is an increase in the basis sector income of Rp1 million, the total revenues in OKU district in 2010 will increase by Rp6,81 million. From the calculation shows that the decline in the basis sector multiplier effect from year to year.
### Table 5: The Calculation of Economy Base Model Multiplier Year 2010-2015 (Million Rupiah).

<table>
<thead>
<tr>
<th>Sector</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Basis Sectors</td>
<td>6.81</td>
<td>6.62</td>
<td>6.38</td>
<td>6.23</td>
<td>6.04</td>
<td>6.03</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics (processed)

### 3.4. The analysis of the shift in economy sectors growth

In the shift share analysis, there are three concepts of growth components, namely: a component of the National Growth (PN), Proportional growth component (PP), components of Regional Growth Share (PPW). In the components of national growth are positive for all (Appendix 2). This means that there is an increase in the contribution of each sector due to changes in national policy. The sectors that contributed namely agriculture, forestry, and fisheries. It indicates that the sector is very influential on national policy changes, which means that the changes in national policy will also change the contribution of the sector and its subsectors. While the sector with a small increase in the contribution to the change in national policy is the company services sector.

In the proportional growth component, PPij value > 0 indicates that a sector in the region experience a rapid growth, and vice versa if the value PPij < 0 then it shows that the sector experience a slow growth. It is shown in Table 6, there are six slow growing sectors namely agriculture, forestry and fishery, mining and excavation, manufacture, water supply, waste management, waste and recycling sector, public administration, defense and compulsory social security, health and social activities, and the other services sectors. The slow growth could be due to changes in tax policies, subsidies, market structure, and others. The slow proportional sector growth needs to be accelerated so that the region’s economic growth encouraged to increase.

The region’s share growth components, the value of PPWij > 0 indicates that a sector in the region has a good competitiveness, while if the value PPWij < 0 means a sector in the region has less competitiveness. The results of the analysis of the share growth of OKU Selatan during 2010-2015 are presented in Table 7. Based on Table 7 there are six sectors that show the less competitive sectors, namely agriculture, forestry, and fishery, construction, company service sector, public administration, defense and compulsory social security, health and social activities, and other service sectors. The six sectors should be enhanced to be able to spur economic growth in the region.

The value of net growth sectors included in the advanced group can be shown if the value PPij + PPWij > 0. Meanwhile, if the value PPij + PPWij < 0, then the sector is
Table 6: Proportional Growth Components Value Year 2010-2015.

<table>
<thead>
<tr>
<th>Sector</th>
<th>PP</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, and Fishery</td>
<td>-62,345,53</td>
<td>Slow</td>
</tr>
<tr>
<td>Mining and Excavation</td>
<td>-5,511,60</td>
<td>Slow</td>
</tr>
<tr>
<td>Processing Industry</td>
<td>-5,847,63</td>
<td>Slow</td>
</tr>
<tr>
<td>Gas and Electricity</td>
<td>132,06</td>
<td>Rapid</td>
</tr>
<tr>
<td>Water Supply, Waste Management, Waste and Recycle</td>
<td>-18,98</td>
<td>Slow</td>
</tr>
<tr>
<td>Construction</td>
<td>41,937,70</td>
<td>Rapid</td>
</tr>
<tr>
<td>Wholesale and Retail; Cars and Motorcycle Reparation</td>
<td>15,799,33</td>
<td>Rapid</td>
</tr>
<tr>
<td>Transportation and warehouse</td>
<td>3,951,74</td>
<td>Rapid</td>
</tr>
<tr>
<td>Accommodation Supply and Food and Drink</td>
<td>2,643,99</td>
<td>Rapid</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>1,761,59</td>
<td>Rapid</td>
</tr>
<tr>
<td>Financial Service and Insurance</td>
<td>6,246,49</td>
<td>Rapid</td>
</tr>
<tr>
<td>Real Estate</td>
<td>26,769,67</td>
<td>Rapid</td>
</tr>
<tr>
<td>Company Services</td>
<td>115,89</td>
<td>Rapid</td>
</tr>
<tr>
<td>Public Administration, Defense and Compulsory Social Security</td>
<td>-13,462,08</td>
<td>Slow</td>
</tr>
<tr>
<td>Educational Services</td>
<td>36,355,51</td>
<td>Rapid</td>
</tr>
<tr>
<td>Health Services and Social Activities</td>
<td>5,020,66</td>
<td>Rapid</td>
</tr>
<tr>
<td>Other Services</td>
<td>-6,002,77</td>
<td>Slow</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics (processed)

relatively slow growth. The results of calculations and the analysis of net growth can be seen in Table 8. Based on table 8, it can be seen that there are 6 sectors of the slow net growth. These six sectors, namely agriculture, forestry and fishery, manufacturing, wholesale and retail sector; repair of cars and motorcycles, the company services sector, the sector of public administration, defense and compulsory social security, and other services sectors. Those sectors need to be encouraged to become more advanced sectors. The advanced net growth will spur the region’s economic growth.

The evaluation of the growth profile of economy sectors of OKU Selatan district is conducted through four quadrants contained on the number line. The values contained in four quadrants are obtained from the value of proportional growth (PP) and the percentage of region’s share growth value (PPW). The percentage of PP and PPW will show on the quadrant where each sector is located and it can be seen that the sector will be prioritized to be developed in the OKU Selatan.

During the period 2010-2015 the evaluation results of the performance of the economic sector in OKU Selatan which can be seen in quadrant shift share analysis shows that:
Table 7: The Share Growth Component of Region Year 2010-2015.

<table>
<thead>
<tr>
<th>Sector</th>
<th>PPW</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, and Fishery</td>
<td>-98,429,91</td>
<td>Less Competitive</td>
</tr>
<tr>
<td>Mining and Excavation</td>
<td>10,409,19</td>
<td>Competitive</td>
</tr>
<tr>
<td>Processing Industry</td>
<td>5,364,24</td>
<td>Competitive</td>
</tr>
<tr>
<td>Gas and Electricity</td>
<td>459,57</td>
<td>Competitive</td>
</tr>
<tr>
<td>Water Supply, Waste Management, Waste and Recycle</td>
<td>133,51</td>
<td>Competitive</td>
</tr>
<tr>
<td>Construction</td>
<td>-62,066,40</td>
<td>Less Competitive</td>
</tr>
<tr>
<td>Wholesale and Retail; Cars and Motorcycle Reparation</td>
<td>85,576,84</td>
<td>Competitive</td>
</tr>
<tr>
<td>Transportation and warehouse</td>
<td>3,169,49</td>
<td>Competitive</td>
</tr>
<tr>
<td>Accommodation Supply and Food and Drink</td>
<td>1,937,09</td>
<td>Competitive</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>6,227,23</td>
<td>Competitive</td>
</tr>
<tr>
<td>Financial Service and Insurance</td>
<td>503,54</td>
<td>Competitive</td>
</tr>
<tr>
<td>Real Estate</td>
<td>15,731,55</td>
<td>Competitive</td>
</tr>
<tr>
<td>Company Services</td>
<td>-125,08</td>
<td>Less Competitive</td>
</tr>
<tr>
<td>Public Administration, Defense and Compulsory Social Security</td>
<td>-109,242,09</td>
<td>Less Competitive</td>
</tr>
<tr>
<td>Educational Services</td>
<td>8,564,07</td>
<td>Competitive</td>
</tr>
<tr>
<td>Health Services and Social Activities</td>
<td>-2,880,30</td>
<td>Less Competitive</td>
</tr>
<tr>
<td>Other Services</td>
<td>-2,352,37</td>
<td>Less Competitive</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics (processed)

1. The sectors that are in quadrant I, namely electricity and gas supply sector, wholesale and retail, repair of cars and motorcycles, transportation and warehouse sector, the accommodation supply and food and drink, the information and communication sector, financial services and insurance sector, real estate, as well as educational services sector. Those sectors mean that their performance have a rapid growth rate and have a good competitiveness.

2. The sectors that are in quadrant II are the construction sector, the company service sector, and health services and social activities sectors. During the analysis period. Those sectors have an accelerated growth but relatively poor competitiveness.

3. The sectors that are in quadrant III are agriculture, forestry, and fishery sector, public administration, defense and compulsory social security, and other services.
This means that during the analysis period, those sectors have a slow growth and lack of competitiveness.

4. The sectors that are in quadrant IV are the mining and excavation sector, manufacturing sector, as well as the sectors of water supply, waste management, waste and recycling, educational services sector. Those sectors mean that during the analysis period, the growth is considered to be a slow growth, but the competitiveness is relatively good.

From the quadrant analysis, it can be seen that for the period 2010-2015, there are 8 fast-growing sectors and have a good competitiveness. Figure 5 shows the results of the analysis of the economic structural shift in the four quadrants during the period 2010-2015.

### 3.4.1. Overlay analysis

Overlay analysis is a method to determine the priority sectors to be developed in the region. Based on the shift share and LQ analysis, there are three sectors with LQ value
(+), PP (+), and PPW (+) that can be prioritized for development in OKU Selatan district, namely 1) wholesale and retail trade sector; repair of cars and motorcycles, 2) the real estate sector, 3) educational services sector, while 14 other sectors are not the dominant sectors that still need to be encourage their growth and competitiveness. The following Table 9 shows the results of the overlay analysis of more than 17 economic sectors in the OKU Selatan district.

The study conducted by Hilal Almulaibari (2011) uses the analysis of Klassen typology to classify the level of excellence of economic sectors. The grouping uses the calculation results of Location Quotient index (LQ> 1), the proportional growth component (PP> 0), and the share growth of the region component (PPW> 0) to determine the group of the leading sectors. Klassen Typology classify the basis and non-basis sectors by combining the LQ index with PP and PPW component in the shift share analysis. The grouping of the level of leading sectors is based on the analysis of Klassen typology which consists of 8 typologies which are excellent, very good, good, more than enough, enough, almost enough, less, very less.
Table 9: The Mapping Notation of LQ, PP, and PPW Based on Klassen Typology.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Notation LQ</th>
<th>Notation PP</th>
<th>Notation PPW</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, and Fishery</td>
<td>(+)</td>
<td>(-)</td>
<td>(-)</td>
<td>More than enough</td>
</tr>
<tr>
<td>Mining and Excavation</td>
<td>(-)</td>
<td>(-)</td>
<td>(+)</td>
<td>Less</td>
</tr>
<tr>
<td>Processing Industry</td>
<td>(-)</td>
<td>(-)</td>
<td>(+)</td>
<td>Less</td>
</tr>
<tr>
<td>Gas and Electricity</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>Enough</td>
</tr>
<tr>
<td>Water Supply, Waste Management, Waste and Recycle</td>
<td>(-)</td>
<td>(-)</td>
<td>(+)</td>
<td>Less</td>
</tr>
<tr>
<td>Construction</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
<td>Very good</td>
</tr>
<tr>
<td>Wholesale and Retail; Cars and Motorcycle Reparation</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>Excellent</td>
</tr>
<tr>
<td>Transportation and warehouse</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>Enough</td>
</tr>
<tr>
<td>Accommodation Supply and Food and Drink</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>Enough</td>
</tr>
<tr>
<td>Information and Communication</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>Enough</td>
</tr>
<tr>
<td>Financial Service and Insurance</td>
<td>(-)</td>
<td>(+)</td>
<td>(+)</td>
<td>Enough</td>
</tr>
<tr>
<td>Real Estate</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>Excellent</td>
</tr>
<tr>
<td>Company Services</td>
<td>(-)</td>
<td>(+)</td>
<td>(-)</td>
<td>Almost enough</td>
</tr>
<tr>
<td>Public Administration, Defense and Compulsory Social Security</td>
<td>(+)</td>
<td>(-)</td>
<td>(-)</td>
<td>More than enough</td>
</tr>
<tr>
<td>Educational Services</td>
<td>(+)</td>
<td>(+)</td>
<td>(+)</td>
<td>Excellent</td>
</tr>
<tr>
<td>Health Services and Social Activities</td>
<td>(+)</td>
<td>(+)</td>
<td>(-)</td>
<td>Very good</td>
</tr>
<tr>
<td>Other Services</td>
<td>(+)</td>
<td>(-)</td>
<td>(-)</td>
<td>More than enough</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics

The results of the mapping notation of LQ, PP, and PPW presented in table 9 can be explained that:

1. Group I is a sector that has LQ (+), PP (+), and PPW (+). With the excellent level, this sector should be prioritized into leading sectors that could be developed. The sectors included in this group are the wholesale and retail trade; repair of cars and motorcycles, the real estate sector, and educational services sectors.

2. Group II can be assessed as a very good sector. This sector is a basis sector which is able to grow faster but less competitive. Included in this sector are the construction sector, as well as the health services sector and social activities. Policy implications that need to be improved the competitiveness of this sector to be prioritized for development.
3. Group III is a sector that is quite superior (enough level), where this sector is a sector that is able to grow rapidly and competitive but it is not a basis sector. There are five sectors that are quite superior namely electricity and gas supply, transportation and warehouse sector, accommodation supply and food and drink, the information and communication sector, financial services and insurance sector.

4. Group IV is a sector considered more than enough, which is the basis sector, but it has a negative growth and competitiveness. There are three sectors that are included in this sector, including agriculture, forestry, and fisheries sector, public administration, defense and compulsory social security. Policy implications that can be done is to stimulate the growth and competitiveness of this sector.

5. Group V is considered almost enough with LQ (-), PP (+), and PPW (-). The service sector includes on this group.

6. Group VI is the sectors considered less superior. There are three sectors that are included in this group, namely the mining and excavation, manufacturing, the water supply, waste management, waste and recycling.

4. Conclusion and Suggestion

4.1. Conclusion

The economic potential of OKU Selatan District that is abundant has not been effective. GDP growth rate also tends to be slow compared to the OKU Timur District. The purpose of this study is to analyze the development of the GDP during 2010-2015 period, to analyze the economic basis sectors, to analyze the sector which is able to grow fast and competitive, as well as to map the priority economic sectors in the OKU Selatan district. The methods of analysis use LQ, shift share and overlay analysis. There are 8 basis sectors and 9 non-basis sectors during the period of 2010-2015. The calculation result shows that the income multiplier value decreased multiplier effect of economic sectors from year to year basis. The result of shift share analysis shows that: 1) Electricity and gas supply, 2) Wholesale and retail trade, repair of cars and motorcycles sector, 3) Transportation and warehouse, 4) Accommodation, and Food and drink, 5) Information and communication sector, 6) Financial services and insurance sector, 7) Real estate sector, as well as 8) Education service sector are in the first quadrant for the period 2010-2015. This means that those sectors experienced both rapid growth and good
competitiveness. Overlay analysis results provide an assessment that the sector can be prioritized for development: 1) wholesale and retail trade sector; repair of cars and motorcycles, 2) the real estate sector, 3) educational services sector.

4.2. Suggestion

The evaluation of each performance of the economy sector should be done with this method of analysis. It is necessary to know which sectors need to be developed in order to improve the region’s economic growth. The sectors that should be prioritized for development in the OKU Selatan are: 1) wholesale and retail trade sector; repair of cars and motorcycles, 2) the real estate sector, 3) educational services sector.

Given the OKU Selatan is a district that still have a lot to clean up, if the infrastructure sector can be fixed, the growth in the region will increase. As OKU Timur district is equally originated from the expansion district area. The government of OKU Selatan District also needs to revitalize the sectors which their growth is slow, this is done in order to increase the productivity of the sector. Furthermore, the comparative advantage of economic sectors will be able to increase the revenues in OKU Selatan. Some sectors which their growth is slow and poor competitiveness needs to be accelerated in order to further increase growth and competitiveness.

References


