HYBRID SWOT-ANP MODEL FOR POLICY PRIORITIES OF REGIONAL ECONOMIC DEVELOPMENT IN MALUKU PROVINCE

Bayu Kharisma

Department of Economics, Faculty of Economics and Business, Universitas Padjadjaran
Jl. Dipati Ukur No. 35 Bandung, 40132, Indonesia
Researcher of the Center of Maluku Corner Universitas Padjadjaran

ABSTRACT
This research aims to analyze the potentials of the leading sector and to formulate policy priorities for regional economic development in Maluku Province. The research methodology used in this research is Location Quotient (LQ), Growth Ratio Model (MRP), Overlay analysis and Analytic Network Process (ANP). The result of the research shows that in Maluku Province there are 8 economic categories that have base sector namely agriculture, forestry and fishery category; categories of water supply, waste management and recycling; major trade and retail and auto-motorcycle repair categories; categories of transportation and warehousing; government administration, defense and compulsory social security schemes; categories of education services; categories of health services and social activities; and other service categories. The result of growth ratio (MRP) shows that the sector with the highest average regional growth rate (RPs) in Maluku province is mining and quarrying sector. Furthermore, overlay analysis shows that the sectors of government administration, defense, compulsory social security schemes and major trade and retail; car and motorcycle repairs. The result of SWOT-ANP analysis shows that policy priority in regional development is the acceleration of infrastructure development. The policy through the acceleration of infrastructure is essential for connectivity and fisheries and marine development as well as tourism which is the main sector in Maluku Province.

Keywords: Regional Economic Development in Maluku Province, Location Quotient (LQ), Growth Ratio Model (MRP), Overlay Analysis, Analytic Network Procecss (ANP), Infrastructure Policy

1Corresponding author, email address: bayu.kharisma@unpad.ac.id
1. INTRODUCTION

The development policy of Maluku Province cannot be separated from the small islands that dominate the areas. Its central potentials are in the field of fisheries, agriculture, and mining. The problems of small island development are always linked to conflicts between environment and economic activity. Therefore, the ecological vulnerability of small islands will greatly affect the development process. Degradation of certain ecosystems will cause problems to the surrounding environment. Consequently, it is necessary to formulate policies to deal with economic pressures while also maintaining the integrity of the natural resources for sustainable development.

Maluku Province consists of many small islands. Thus connectivity between marine fisheries development and tourism should be the leading developed sector and priority program. Therefore, infrastructure development program, from the construction of road infrastructure, bridges, ports, to the airport is expected to minimize transaction costs and indirectly move the economy more evenly to all regions in Maluku. Meanwhile, the development of tourism sector is expected to have a positive impact on economic performance and community welfare in Maluku Province as it provides jobs enabling people to earn income.

However, the development of marine fisheries and tourism supported by infrastructure will not be effective if it is not supported with skilled human resources in Maluku Province, especially if it is associated with the fast-growing oil and gas sector in Masela Block. Therefore, the existence of skilled human resources is needed, both through vocational education and training so Maluku Province can have a skilled and competitive workforce. Also, skilled workforce is dependent on a better level of health. Thus, the improvement of health facilities is important as proper health can increase the economic productivity of the Maluku people.

In 2017, the Gross Regional Domestic Revenue (PDRB) in Maluku province from the demand side is supported by the high level of household consumption. The high household consumption is influenced by the increase of income through the provision of Hari Raya Allowances (THR) for Civil Servants (PNS) and private employees in June 2017. Revenue also increased in line with the strengthening of Farmers Exchange Rate (NTP) as the Acceptance Index (indeks terima) obtained by farmers is better than the Pay Index (Indeks Bayar) issued by farmers. Farmer's Term of Trade Indices strengthening also occurs in Farmer's Term of Trade Indices food material, Farmer's Term of Trade Indices plantations, and Farmer's Term of Trade Indices livestock. Thus, these things encourage higher consumption, especially during Idul Fitri holiday (Hari Raya) that coincides with school children's holidays.

Meanwhile, PDRB from industrial origin, agricultural performance, forestry and fishery as one of the main categories grew slowly. The slow growth is due to slow performance of fisheries as extreme weather hamper fishing activities. However, for the foreseeable future, the agriculture and fisheries sector is expected to grow considerably, in line with the improving weather that can increase the productivity of fisheries.

The main contributing sectors are agriculture, forestry, and fisheries, from 5.2 trillion in 2012 to around 6.2 trillion in 2016. However, the growth rate fluctuates with 2012 having a growth of 6.23 percent, but decreasing to 4.82 in 2016. For those
five years, growth in 2012 is the highest with the lowest in 2015, which is only at 1.25 percent. More details can be seen in Table 1 below.

**Tabel 1.**

**Gross Domestic Product at Constant Market Prices By Industrial Origin (Billion Rupiahs), 2012-2016**

<table>
<thead>
<tr>
<th>Industrial Origin</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016**</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>A Agriculture, Livestock, Forestry and Fishery</td>
<td>5.282,61</td>
<td>5.500,92</td>
<td>5.835,44</td>
<td>5.908,22</td>
<td>6.192,71</td>
</tr>
<tr>
<td>B Mining and Quarrying</td>
<td>663,46</td>
<td>674,43</td>
<td>819,22</td>
<td>811,27</td>
<td>842,97</td>
</tr>
<tr>
<td>C Manufacturing Industry</td>
<td>1.121,18</td>
<td>1.186,17</td>
<td>1.286,06</td>
<td>1.336,32</td>
<td>1.430,36</td>
</tr>
<tr>
<td>D Electricity, Gas &amp; Water Supply</td>
<td>18,03</td>
<td>18,72</td>
<td>25,65</td>
<td>26,99</td>
<td>29,24</td>
</tr>
<tr>
<td>E Water Supply, Waste Management and Recycling</td>
<td>109,01</td>
<td>112,26</td>
<td>118,82</td>
<td>119,48</td>
<td>124,34</td>
</tr>
<tr>
<td>F Construction</td>
<td>1.403,27</td>
<td>1.511,83</td>
<td>1.622,35</td>
<td>1.712,13</td>
<td>1.797,42</td>
</tr>
<tr>
<td>G Wholesales, Retail, Car Repair, Motor</td>
<td>2.976,30</td>
<td>3.198,28</td>
<td>3.327,58</td>
<td>3.564,80</td>
<td>3.776,00</td>
</tr>
<tr>
<td>H Transportation and Warehousing</td>
<td>1.118,33</td>
<td>1.191,63</td>
<td>1.295,79</td>
<td>1.361,61</td>
<td>1.418,65</td>
</tr>
<tr>
<td>I Provision of Accommodation and Meals Drink</td>
<td>373,90</td>
<td>404,59</td>
<td>423,52</td>
<td>456,30</td>
<td>455,15</td>
</tr>
<tr>
<td>J Information and Communication</td>
<td>766,10</td>
<td>836,24</td>
<td>899,97</td>
<td>981,13</td>
<td>1.058,79</td>
</tr>
<tr>
<td>K Financial Services and Insurance</td>
<td>738,22</td>
<td>810,02</td>
<td>861,68</td>
<td>924,51</td>
<td>1.009,71</td>
</tr>
<tr>
<td>L Real Estate</td>
<td>76,98</td>
<td>79,08</td>
<td>84,69</td>
<td>87,09</td>
<td>89,06</td>
</tr>
<tr>
<td>M, N Company Services</td>
<td>225,69</td>
<td>238,64</td>
<td>250,16</td>
<td>258,71</td>
<td>264,38</td>
</tr>
<tr>
<td>P Educational Services</td>
<td>1.122,99</td>
<td>1.161,96</td>
<td>1.272,53</td>
<td>1.372,33</td>
<td>1.481,77</td>
</tr>
<tr>
<td>Q Health Services and Social Activities</td>
<td>502,86</td>
<td>504,09</td>
<td>517,35</td>
<td>542,49</td>
<td>572,49</td>
</tr>
<tr>
<td>R, S, T, U Other Services</td>
<td>384,81</td>
<td>386,34</td>
<td>407,61</td>
<td>425,97</td>
<td>449,25</td>
</tr>
<tr>
<td><strong>Gross Domestic Product</strong></td>
<td><strong>21.000,08</strong></td>
<td><strong>22.100,94</strong></td>
<td><strong>23.567,73</strong></td>
<td><strong>24.859,06</strong></td>
<td><strong>26.291,19</strong></td>
</tr>
</tbody>
</table>

Note: **Preliminary figures**
Source: BPS Maluku Province, 2016

The rationale for the above phenomenon is the dependency of the agricultural sector with the climate in archipelagos. Not enough infrastructure development to support the growth of agriculture sector becomes the main obstacle. The condition of land, sea and air transportation connecting inter-regency / municipal areas in Maluku province is still challenging to develop. Economic activity is unsuccessfully developed into an investment interest for better technology regarding on-farm and out-farm. Conventionalism still dominates the development of the agricultural sector.

One effort is to see the various potentials owned by an area. If the potential is developed optimally, then it will indirectly benefit the area. Therefore, by optimizing
the economic activity of potential sectors, the sector will grow and become a base sector in the region. With the increase of economic activity in the base and potential sector of the region, it will increase PDRB. Sectoral or leading subsector specialization in each region can improve community effectiveness and efficiency in carrying out economic activities. Thus, the local government must know exactly what the exact base sector and the non-base sector is and the potential sectors for a new base sector in the area. Therefore, looking at the various problems that occurred in Maluku Province, especially from the business or sector, the purpose of this study is to analyze the potentials of the leading sector to identify the overall form of the existing economic structure and prepare policy priorities for economic development in the Maluku Province.

2. PREVIOUS RESEARCH

Research conducted by Adhitama entitled "Development of Economic Sectors In Each subdistrict In the Magelang District." uses a Location Quotient (LQ), Shift Share and Klassen Typology methodology. The result of the research shows that the service sector, agriculture sector, trade, hotel, and restaurant sector in Magelang District are the leading sector in every sub-district in the Magelang district. There are nine sub-districts with a leading sector in the service sector, eight sub-districts with a lead in the agricultural sector and seven districts with a lead in the trade, hotel and restaurant sector.

Basuki and Gayatri’s research entitled "The Leading Sector Determinants in Regional Development: A Case Study In Ogan Komering Ilir District." uses Growth Ratio Model (MRP) approach, Shift Share, LQ, and Overlay and Klassen Typology. The study concludes that the economic potential of Ogan Komering Ilir (OKI) District is the agricultural sector and manufacturing industry which is the dominant growth sector. Also, the sector also shows an improvement in the structure of economic growth. This is because most of the population in the OKI district is still involved in agriculture. Thus agriculture have a tremendous growth compared to other economic sectors. Also, the manufacturing industry is also an economic sector with remarkable growth, among them the kemplang and pempek industries developed in the province of South Sumatra and OKI District.

Research conducted by Setyorini and Setyawati under the title "Identification of Regional Development of Members of Regional Institutions of Barlingmascakeb" uses a Klassen Typology analysis, MRP, LQ analysis, Krugman Divergence Index analysis and Connectivity Quotient (CQ) analysis. The research found that the Cilacap Regency is classified in the advanced and fast-growing area, Purbalingga District is included in fast-growing areas, and Banjarneagara, Banyumas, and Kebumen regencies are classified as relatively lagging regions.

Gunawan (2011) analyzed the key economic sectors of Rembang Regency in 2000-2008. This research uses shift-share method, MRP, location quotient, overlay, and forecasting to analyze the growth of the economic sector, leading sector, and economic forecasting. The results are based on overlay analysis (exposure of net shift analysis, MRP analysis, and LQ analysis) the dominant, competitive and surplus economic sector in the Rembang district is the mining and quarrying sector.

Marlina (2014) analyzed the leading sector in the economy of Bogor City (2006-2012 period) through LQ, shift share, MRP, and overlay methods. The overlay analysis shows one leading sector in the Bogor’s economy, namely the electricity,
gas, and water sector. Increased construction, industrial and commercial activities in Bogor City affects the growth of the electricity, gas and water supply sectors. Regarding subsector, there are three main subsectors, namely water, a financial institution other than a bank, and building lease sub-sector. The leading subsectors have dominant, competitive and surplus commodity properties.

3. METHODOLOGY

In analyzing this research, it uses Location Quotient (LQ), Growth Ratio Model (MRP), Overlay analysis and Analytic Network Process (ANP). The analysis tool aims to identify the leading sector and economic structure that exists in all the provinces of the Maluku island. The research also undertakes the following series of studies and/or analysis: 1) theoretical studies and 2) empirical fact-finding/study. Theoretical studies were conducted through literature studies, while empirical facts / empirical analysis were conducted from secondary data collected through various documents. Furthermore, the initial review and/or analysis becomes the basis for the subsequent review process; construct a SWOT model and an analytic network process (SWOT-ANP).

The SWOT-ANP models are mainly used to obtain expert perceptions or opinions of on the alternative priorities policy which are the primary consideration of experts in producing policy priorities. This step is done by filling out a questionnaire constructed from empirical literature and focus group discussion (FGD). A combination of SWOT and Analytic Network Process (ANP) is an appropriate choice as they have the ability to overcome the following obstacles: 1) the existence of variables that are difficult to quantify, e.g., the principles used in plantation operations; 2) the existence of subjective values of variables from consensus judgment, 3) the limitations of secondary and primary data.

3.1. Location Quotient Analysis

Location Quotient Analysis (LQ) is a statistical method that uses the characteristics of output/value added or employment opportunity to analyze and determine the diversity of the local base economy (Arsyad, 1999). Sectors classified into the local base economy are sectors concerning income and employment. The LQ analysis provides a framework for understanding the stability and flexibility of the economy to change conditions by analyzing the degree of industry/sectors in the community (Heilbrun, 1987).

LQ analysis is often used to estimate the export industry or base industry, where the industry can bring units of money to the community through the export of goods and services, such industries are then known as base industries. In the meantime, industries that supply goods and services for local/regional consumption are referred to as non-base industries.

The base economy theory emphasizes the variety of export activities (base) that stimulate the economy, and regional economic activity depends on the growth (or reduction) of the export activity. The assumptions of this theory are:

- All residents in each region have the same pattern of demand as the national demand pattern (reference area), this condition assumes that the spending pattern is geographically the same
- That labor productivity in all regions is the same
Every industry/sector will produce a homogeneous product. In this technique, the economic activity of a region is divided into two groups, namely:

- Industrial activities that serve the market in the region or outside the area concerned. The sector/industry is often called the base industry.
- Economic or industrial activity serving the market in the area, this type of sector/industry is called non-base industry or local industry.

The LQ analysis of a particular industry or sector compares sector share of the total output at the local level with the same sector share of total output at the national level (larger area, called reference region). If the share of industry/sector is greater than the share of industry in the national sector, then the portion of the excess of output/labor can explain the number of exports that occur. The statement can be formulated as follows:

\[
LQ_i = \frac{v_i}{v_t} \div \frac{V_i}{V_t}
\]

Where:

- \( LQ_i \) denotes the value of location quotient i sector in an area
- \( v_i \) denote the amount of output/labor of industry i in an area
- \( v_t \) denotes the total amount of output/labor available in an area
- \( v_i \) denote the amount of output / labor of industry i in the reference region
- \( v_t \) denote the total amount of output / labor available in the reference region

The value shown in this LQ formula is explained below:

- If the value of \( LQ_i > 1 \) then sector i in the area is more specialized than the same sector in the reference region, in other words the sector is capable of exporting its products/labor (base sector)
- If the value of \( LQ_i <1 \) then sector i in the area is less specialized than the same sector in the reference region, in other words the sector is unable to export its products/labor (non-base sector)
- If the value of \( LQ_i = 1 \) then sector i in the area has the same level of specialization compared to the same sector in the reference region, other words the sector is able to meet the needs of its own region

3.2. Growth Ratio Model (MRP)

In addition to LQ to identify potential economic categories and subcategories based on PDRB contribution criteria, other analysis tools are important to identify potential economic potentials in Maluku Province. MRP analysis is also used to analyze potential economic categories and subcategories based on PDRB growth in Maluku Province. This growth ratio model is used to view the description of economic activity, especially the economic structure of the research area, emphasizing on growth (Basuki & Gayatri, 2009)

The growth ratio model can be used to determine the sector or the leading subsector based on the PDRB growth. This model of analysis uses the comparison of the growth of a sector or subsector on a small or large scale. In MRP analysis, there are two kinds of growth ratios, namely (Tarigan, 2005):

a) Growth Ratio of Reference Areas (RPr)
The average income growth ratio (PDRB) of category i in Indonesia with an average income growth (PDRB) in Indonesia with the formula:

\[ C_i = \left[ \frac{\Delta E_{ij}}{E_{ij}} - \frac{\Delta E_{in}}{E_{in}} \right] E_{ij} \]

\[ C_i = \Delta E_{in} - \frac{\Delta E_{in} E_{ij}}{E_{in}} \]

\[ C_i = \left[ \frac{\Delta E_{ij} E_{in}}{E_{in} \Delta E_{ij}} - 1 \right] \frac{\Delta E_{in} E_{ij}}{E_{in}} \]

\[ \frac{\Delta E_{in} C_i}{\Delta E_{in} E_{ij}} + 1 = \frac{\Delta E_{ij} E_{n}}{E_{in} \Delta E_{ij}} = \frac{\Delta E_{ij}}{E_{in}} \]

Rasio pertumbuhan wilayah referensi (RPr) = \[ \frac{\Delta E_{in}}{E_{in}} \]

b) Growth Ratio of Study Areas (RPs)
The comparison between the growth of income (PDRB) category i in Maluku Province with income growth (PDRB) category i in Maluku Province, with the formula:

\[ M_i = \left[ \frac{\Delta E_{in}}{E_{in}} - \frac{\Delta E_{n}}{E_{n}} \right] E_{ij} \]

\[ M_i = \frac{\Delta E_{in} E_{n}}{E_{in} E_{n}} - \frac{\Delta E_{n} E_{in}}{E_{in} E_{n}} \]

\[ M_i = \left[ \frac{\Delta E_{in} E_{n}}{E_{in} \Delta E_{n}} - 1 \right] \frac{\Delta E_{n}}{E_{n}} \]

\[ \frac{\Delta E_{in} C_i}{\Delta E_{in} E_{ij}} + 1 = \frac{\Delta E_{ij} E_{n}}{E_{in} \Delta E_{ij}} = \frac{\Delta E_{ij}}{E_{in}} \]

Rasio pertumbuhan wilayah referensi (RPs) = \[ \frac{\Delta E_{ij}}{E_{in}} \]

Explanation:
- \( \Delta E_{ij} \) = Change of PDRB category (subcategory) i in Maluku Province
Based on the above formula or ratio, there are 4 categories in the growth ratio model, among others:

1. RPs and RPr have a value (+), meaning those activities at the reference region level and the research area growth rate stands out.
2. The value of RPs (+) and RPr (-), means that the activity at the reference level is growing prominently and the growth at the research area is not yet outstanding.
3. The value of RPs (-) and RPr (+), means that activities at the reference level do not have a prominent growth and the growth at the the research area stand out.
4. RPs and RPr have a value of (-), means the activity at the reference region level or the growth at the research area is not yet outstanding.

3.3. Overlay Analysis
After calculating using LQ and MRP analysis, the next is to overlay the results of LQ analysis with MRP analysis. This overlay technique uses the calculation of RPs (growth) and LQ (contributions), the results of this analysis are used to develop potential economic sectors (Kuncoro, 2004). The results of this analysis are classified into four types, namely:

1. RPs and LQ have a value (+), indicate the economic sector is dominant in growth and contribution.
2. RPs (+) and LQ (-), indicate the economic sector is dominant in growth, but its contribution is small.
3. RPs (-) and LQ (+), indicate the economic sector has small growth but a big contribution.
4. RPs and LQ have a value (-), indicate that the economic sector has a small value in both growth and contribution.

3.4. Analytic Network Process (ANP) Analysis
Analytical Network Process (ANP) is a mathematical theory that allows a decision maker to deal with interrelated (dependence) factors and feedback systematically. ANP is one of the decision-making methods based on multiple criteria or Multiple Criteria Decision Making (MCDM) developed by Thomas L Saaty (Saaty, 1999).

This method is a new approach to qualitative methods, further development of the previous method of Analytical Hierarchy Process (AHP) (Tanjung and Devi, 2013). The ANP method can improve the deficiencies of the AHP method whereby its ability can accommodate linkages between criteria or between alternatives (Saaty,
The linkage between criteria on the ANP method has two types; relation in a set of elements (inner dependence) and interrelation between different elements (outer dependence).

The decision means the choice is a choice of two or more possibilities. The problem of public, managerial and business decision making is complex, dynamic, and sometimes less structured involving different decision-making groups, so its formulation requires theoretical and operational theories and techniques.

Problem-solving involves multiple and alternative criteria with dynamic and probabilistic characteristics and structures. Progress in the field of decision theory has enabled developed techniques and decision-making methods to assist in problem-solving. Problem-solving is emphasized on comprehensiveness, effectiveness while still considering the efficiency aspects of the method and in its application. The steps taken in decision making are as follows:

1. **Problem Definition.**
   - The problem must be defined so that the solution does not deviate from the goal.

2. **Criteria Identification.**
   - The existence of the criteria facilitates the assessment of each alternative.

3. **Criteria weighing.**
   - Each criterion can have different levels of importance. Therefore the weight of each criterion can be different.

4. **Identify alternatives.**
   - Any possible alternatives should be identified, so none is left out.

5. **Assessment of each alternative.**
   - Alternatives are assessed against predetermined criteria. Quantitative calculations are performed by multiplying the value of each criterion by weighting.

6. **Determination of alternatives taken.**

ANP method is one of the methods developed from the previous method of AHP (Analytic Hierarchy Process) method. ANP method can improve the deficiencies of AHP method by accommodating the interconnection between criteria or alternatives (Saaty, 2005; Aziz, IJ, 2001). The relation between criteria on the ANP method has two types; relation in a set of elements (inner dependence) and interrelation between different elements (outer dependence). This requires a hierarchical classification that is modified into a feedback network. The existence of such linkage causes ANP method to be more complex than AHP method.

ANP is a mathematical theory that allows one to treat dependencies and feedback in a systematic way that captures and combines tangible and intangible factors. ANP is one of the new theories in the decision-making process that provides a common framework for treating decisions without making assumptions about the independence of higher and lower level elements and the independence of the elements in a level. With feedback, alternatives can be dependent or tied to criteria such as hierarchy but can also be dependent or tied to an alternative. Meanwhile, feedback increases the priority derived from judgments and makes predictions more accurate. Therefore, the results of the ANP are expected to be more stable.
ANP is a combination of two parts. The first part consists of control or network hierarchy of criteria and sub-criteria that control interactions. The second part is the network of influences between elements and clusters. AHP and ANP both use scale scales. Priorities on a ratio scale are fundamental numbers that allow for the calculation of base arithmetic operations such as addition and subtraction on the same scale, multiplication, and division on different scales, and combine both with the appropriate weighting and add different scales to obtain a one-dimensional scale.

The base principle of the ANP's work is the network-shaped problem structure, with the connection cycle of its clusters in which the network model can accommodate reciprocal functional dependencies, i.e., the interdependent relationship between the upper and lower level components. Also, there are weighting element against a reference component, where the weighting is done using a pairwise comparisons matrix. Stages of decision-making with ANP are as follows (Ascarya, 2005):

1. Develop Problem Structure and Develop Linkage Model. Determine goals or objectives, define the criteria that refer to the control criteria, and determine alternative options. Elements with equal quality are grouped into the same component (level or cluster).

2. Forming a Pairwise Comparison Matrices.
   In weighing, multiple methods can be used, among others, arbitrarily assigning weights, making interval scales that determine the order of each criterion, or by pairing comparisons so that the importance of a criterion relative to other criteria can be stated. ANP assumes that decision makers should make a comparison of interests between all elements for each level in pairs. The comparison is transformed into a matrix form. Comparison can be made directly (with discussion) or through a questionnaire.

3. Calculating Element Weight
   If pairwise comparisons are complete, the w priority vector called eVector is calculated by the formula:
   \[ Aw = \lambda_{\text{max}}W \]
   with A is a pairwise matrix of matrices and \( \lambda_{\text{max}} \) is the largest eigenvalue of A. eVector or eigenvector is the priority weight of a matrix which is then used in supermatrix arrangement.

4. Calculating Consistency Ratio
   The purpose of calculating the consistency ratio is to see if the value of the consistency ratio to a certain degree, i.e., 10% or less is still allowed. In real conditions, there is the possibility of deviations from pairwise comparisons caused by inconsistencies in a preference. Consistency ratio (CR) gives a numerical assessment of the inconsistency of an evaluation. Consistency deviation is expressed by a consistency index (CI), with the equation:
   \[ CI = \frac{\lambda_{\text{max}} - n}{n - 1} \]
   where:
   \( \lambda_{\text{max}} \) = maximum eigenvalue of nxn pairwise comparison matrix
   n = matrix size / number of items compared
To identify whether a CI with a certain quantity is good enough or not, it is essential to know the parameter of when a ratio is considered good, i.e. when \( CR \leq 0.1 \). When it’s more than 0.1, it is necessary to reassess. The consistency ratio is obtained by comparing the consistency index (CI) with one corresponding value of the Random Consistency Index (RI), with the equation:

\[
CR = \frac{CI}{RI}
\]

Where:
- CI = Consistency index
- RI = Random value
- CR = Consistency ratio

5. Geometric Mean

To determine the results of the individual assessment of the respondents and determine the results of opinion on a group, an assessment is done by calculating the geometric mean (Saaty, TL & Vargas, LG, 2006). Pairwise comparison of the respondents will be combined to form a consensus. The geometric mean is a type of average calculation that shows a certain tendency or value with the following formula:

\[
\left( \prod_{i}^{n} a_{i} \right)^{1/n} = \sqrt[n]{a_{i} a_{i+1} a_{n}}
\]

6. Rater Agreement

Rater agreement is a measure that shows the level of conformity or agreement of respondents (R1-Rn) to a problem in one cluster (Legendre, 2005). The tool used to measure the rater agreement is Kendall's Coefficient of Concordance (W: 0 < W \leq 1). W = 1 indicates perfect fit. To calculate Kendall's (W), the first thing is to rank every answer then sum it up.

\[
R_i = \sum_{j=1}^{m} = r_{ij}
\]

the average value of the total ranking is as follows:

\[
\bar{R} = \frac{1}{n} \sum_{i=1}^{n} R_i
\]

the sum of the squared deviation (S) is calculated by the following formulation,

\[
S = \sum_{i=1}^{m} = 1(R_i - \bar{R})^2
\]

Kendall's (W) is then obtained through:

\[
W = \frac{12s}{m^2(n^3 - n)}
\]

if the value of W test is 1 (W = 1), the assessment or opinion of the respondents has a perfect fit, whereas when the value of W of 0 or is closer to 0, it indicates a discrepancy between respondents' answers or varied answers.

7. Creating Supermatrix

The ratio of importance in each element or cluster is represented in a matrix by giving the ratio to pairwise comparisons. Each scale of the ratio shows the comparison of interests between the elements inside and outside of a component (outer dependence) or within the element there is an element itself that is inside (inner dependence). Not every element affects elements on other components. Elements that do not affect other elements will give zero
value. Matrices of pairwise results are represented in vertical and horizontal forms and are stochastic matrices called supermatrix.

4. DISCUSSION

In studying the economic potential in Maluku Province, identification and analysis of potential economic categories or subcategories in Maluku Province uses 4 kinds of analysis tools, ie Location Quotient (LQ) Analysis, Growth Element Ratio Analysis (MRP) Analysis, Overlay Analysis and ANP. In more detail the discussion through the four analytical tools will be described below.

4.1. Location Quotient Analysis

Location Quotient (LQ) analysis tools are used to identify the comparative advantages of economic activity (commonly referred to as the base sector) in Maluku Province by comparing it to the National. The LQ analysis in Table 1 shows Maluku Province has 8 economic categories with comparative advantage (LQ value > 1); agriculture, forestry and fishery; water supply, waste management and recycling; major trade and retail and auto-motorcycle repair; transportation and warehousing; government administration, defense and compulsory social security schemes; education services; health services and social activities; and other service.

In agriculture, forestry and fishery category, the value of its LQ has a decreased trend. This is due to the fishery moratorium resulting in a decrease in the fishery subcategory; the forest sub-category’s decrease in illegal logging activities from strict supervision by the government and the security apparatus tends to decrease production. From 2010 to 2016, for the last few years (2013-2014) the El-Nino effect was the cause of prolonged drought resulting in crop failures for food crops and horticulture commodities in districts central to agriculture in Maluku Province, thus indirectly decreasing production in this subcategory. The existence of “Bald Mountain” Phenomenon in 2013-2014 created a lot of agricultural land in the Buru regency to become useless as agricultural workers become a gold miner in the “Bald Mountain” Area.

<table>
<thead>
<tr>
<th>Industrial Origin</th>
<th>Location Quotient (LQ)</th>
<th>Ratata-rata</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Agriculture, Livestock, Forestry and Fishery</td>
<td>1.83</td>
<td>1.82</td>
<td>1.83</td>
</tr>
<tr>
<td>B Mining and Quarrying</td>
<td>0.29</td>
<td>0.32</td>
<td>0.31</td>
</tr>
<tr>
<td>C Manufacturing Industry</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
</tr>
<tr>
<td>D Electricity, Gas &amp; Water Supply</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>E Water Supply, Waste Management and Recycling</td>
<td>6.22</td>
<td>6.21</td>
<td>6.2</td>
</tr>
<tr>
<td>F Construction</td>
<td>0.69</td>
<td>0.7</td>
<td>0.69</td>
</tr>
<tr>
<td>G Wholesales, Retail, Car Repair, Motor</td>
<td>1.09</td>
<td>1.08</td>
<td>1.03</td>
</tr>
<tr>
<td>H Transportation and Warehousing</td>
<td>1.46</td>
<td>1.44</td>
<td>1.41</td>
</tr>
<tr>
<td>I Provision of Accommodation and Meals Drink</td>
<td>0.59</td>
<td>0.59</td>
<td>0.59</td>
</tr>
</tbody>
</table>
4.2. Growth Ratio Model Analysis

The Growth ratio model (MRP) is an analytical tool to identify potential economic categories based on growth criteria. MRP analysis consists of 2 measurement instruments, i.e., Growth Ratio Research area (RPs) which shows the growth ratio between the research area and the larger reference area; Maluku Province to National area. The second instrument is the Reference Growth Rate Reference to aggregate economic growth in the reference region (RPr).

Table 2 shows that the RPs of agriculture, forestry and fishery categories in Maluku Province are less than 1. This indicates that the categories of agriculture, forestry, and fisheries are not potential economic activities in Maluku Province based on the growth criteria. Meanwhile, for the national level, the category of agriculture, forestry, and fisheries is also not a potential category because it has a less than 1 RPr value.

The mining and quarrying category in Maluku Province has an RP value of more than 1, making it a potential category based on the growth criteria. Different conditions are seen at the National level since the RPr value of mining and quarrying shows less than 1. Thus, the overall growth of mining and quarrying categories in Indonesia are less potential, but in Maluku Province, it is a potential category based on the growth criteria. The category of processing industry is potential in Maluku Province with RPs value of more than 1 (RPs = 1.21), but the National RPr shows the category of processing industry is still less potential because RPr value is less than 1 (RPr = 0.97).

The category of electricity and gas procurement is a potential category in Maluku Province with RPs calculation of more than 1 (RPs = 2.14). This category is also a potential category in general in Indonesia, as the RPr value is 1.07. Based on the subcategories, electricity is dominant and potential shown by its greater than 1RPs and RPr value. Meanwhile, the water supply, waste management, waste, and recycling category in Maluku Province is less potential (RPs = 0.76) in growth, with an RPr value of 0.94 at the national level.

The category of construction in Maluku Province is a very potential category (RPs = 1.11) for growth, as well as the growth of the construction category in Indonesia is also a potential category with an RPr value of 1.40. Major trade and retail and auto-motorcycle repair category is also potential in Maluku Province with RPs value are 1.36. Furthermore, the category of transportation and warehousing in
Maluku Province is less potential with an RPs value of 0.92, while the nationally it is very potential with an RPr of 1.45.

The category of accommodation and food and beverage in Maluku Province is a potential category (RPs = 1.21). At the National level, this category is also a potential category with an RPr equal to 1.19. The category of information and communication in Maluku Province is less potential with an RPs value of 0.78; while at the national level it is a very potential category with an RPr value of 2.12. The category of real estate is less potential in Maluku Province (RPs = 0.67) while at the National Level it is potential shown by an RPr value of RPr = 1.23.

The category of corporate services in Maluku Province is not so potential (RPs=0.62); while the national level show, it is very potential (RPr= 1.70). The category of government administration, defense and compulsory social security schemes in Maluku Province is very potential shown with an RPs value of 2.30; at the national level this category less potential with an RPr value of 0.70.

In the category of education services; categories of health services and social activities; and other service categories in Maluku Province, it is less potential, shown from an RPs value of 0.77; 0.49 and 0.34 respectively. On the contrary, the national level show those categories are potential, with an RPr value of 1.40 for the education service categories; 1.62 for category of health services and social activities and other service categories is 1.49.

Table 2. Result of Maluku Province Growth Ratio (RPs) and Indonesia Growth Ratio (RPr) of Maluku Province 2010 - 2016

<table>
<thead>
<tr>
<th>Industrial Origin</th>
<th>RPs</th>
<th>RPr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real</td>
<td>Nominal</td>
</tr>
<tr>
<td>A Agriculture, Livestock, Forestry and Fishery</td>
<td>0.95</td>
<td>-</td>
</tr>
<tr>
<td>B Mining and Quarrying</td>
<td>7.59</td>
<td>+</td>
</tr>
<tr>
<td>C Manufacturing Industry</td>
<td>1.21</td>
<td>+</td>
</tr>
<tr>
<td>D Electricity, Gas &amp; Water Supply</td>
<td>2.14</td>
<td>+</td>
</tr>
<tr>
<td>E Water Supply, Waste Management and Recycling</td>
<td>0.76</td>
<td>-</td>
</tr>
<tr>
<td>F Construction</td>
<td>1.11</td>
<td>+</td>
</tr>
<tr>
<td>G Wholesales, Retail, Car Repair, Motor</td>
<td>1.36</td>
<td>+</td>
</tr>
<tr>
<td>H Transportation and Warehousing</td>
<td>0.92</td>
<td>-</td>
</tr>
<tr>
<td>I Provision of Accommodation and Meals Drink</td>
<td>1.21</td>
<td>+</td>
</tr>
<tr>
<td>J Information and Communication</td>
<td>0.78</td>
<td>-</td>
</tr>
<tr>
<td>K Financial Services and Insurance</td>
<td>1.45</td>
<td>+</td>
</tr>
<tr>
<td>L Real Estate</td>
<td>0.67</td>
<td>-</td>
</tr>
<tr>
<td>M, N Company Services</td>
<td>0.62</td>
<td>-</td>
</tr>
<tr>
<td>O Mandatory Administration of Government, Defense and Social Security</td>
<td>2.3</td>
<td>+</td>
</tr>
<tr>
<td>P Educational Services</td>
<td>0.77</td>
<td>-</td>
</tr>
<tr>
<td>Q Health Services and Social Activities</td>
<td>0.49</td>
<td>-</td>
</tr>
<tr>
<td>R, S, T, U Other Services</td>
<td>0.34</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: own calculations

4.3. Overlay Analysis

Overlay analysis views potential economic categories and subcategories regarding contributions and PDRB growth. If the LQ and MRP analysis results are overlaid, there are four possibilities regarding the economic sector of the research
area. First, if \( LQ > 1 \) and \( RPs > RPr \) (for \( RPs \) and \( RPRs \) greater than 1) then the sector is a very dominant sector, either from the contribution or its growth. This sector is an advanced and fast-growing sector. This sector can be viewed as a leading sector in the studied province. Secondly, if \( LQ < 1 \) but \( RPs > RPr \) (for \( RPs \) and \( RPRs \) greater than 1) then the sector has a small contribution but its growth is getting bigger. This sector is a growing sector, and its contribution can be increased to become the dominant sector. This sector can be viewed as a potential sector in the studied province. Third, if \( LQ > 1 \) but \( RPs < RPr \) then the sector has a big contribution but its growth is smaller. This sector is a sector that is experiencing a decline in growth. This sector can be viewed as a depressed sector in the studied province. Fourth, if \( LQ < 1 \) and \( RPs < RPr \) then the sector is not potential both from the criteria of contribution and growth criteria. This sector that lags behind in the studied province.

Table 3. Analysis of Maluku Province Economic Potential Overlay 2010-2016

<table>
<thead>
<tr>
<th>Lapangan Usaha</th>
<th>RPs</th>
<th>RPr</th>
<th>LQ</th>
<th>Overlay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4) (5) (6)</td>
</tr>
<tr>
<td>A</td>
<td>0.95</td>
<td>0.81</td>
<td>1.8</td>
<td>- - +</td>
</tr>
<tr>
<td>B</td>
<td>7.59</td>
<td>0.23</td>
<td>0.34</td>
<td>+ - -</td>
</tr>
<tr>
<td>C</td>
<td>1.21</td>
<td>0.97</td>
<td>0.24</td>
<td>+ - -</td>
</tr>
<tr>
<td>D</td>
<td>2.14</td>
<td>1.07</td>
<td>0.08</td>
<td>+ + -</td>
</tr>
<tr>
<td>E</td>
<td>0.76</td>
<td>0.94</td>
<td>6.08</td>
<td>- - +</td>
</tr>
<tr>
<td>F</td>
<td>1.11</td>
<td>1.4</td>
<td>0.69</td>
<td>+ + -</td>
</tr>
<tr>
<td>G</td>
<td>1.36</td>
<td>1.06</td>
<td>1.01</td>
<td>+ + +</td>
</tr>
<tr>
<td>H</td>
<td>0.92</td>
<td>1.45</td>
<td>1.4</td>
<td>- + +</td>
</tr>
<tr>
<td>I</td>
<td>1.21</td>
<td>1.19</td>
<td>0.59</td>
<td>+ - -</td>
</tr>
<tr>
<td>J</td>
<td>0.78</td>
<td>2.22</td>
<td>0.86</td>
<td>- + -</td>
</tr>
<tr>
<td>K</td>
<td>1.45</td>
<td>1.54</td>
<td>0.94</td>
<td>+ + -</td>
</tr>
<tr>
<td>L</td>
<td>0.67</td>
<td>1.23</td>
<td>0.12</td>
<td>- + -</td>
</tr>
<tr>
<td>M, N</td>
<td>0.62</td>
<td>1.7</td>
<td>0.67</td>
<td>- + -</td>
</tr>
<tr>
<td>O</td>
<td>2.3</td>
<td>0.7</td>
<td>5.3</td>
<td>+ - +</td>
</tr>
<tr>
<td>P</td>
<td>0.77</td>
<td>1.4</td>
<td>1.75</td>
<td>- + +</td>
</tr>
<tr>
<td>Q</td>
<td>0.49</td>
<td>1.62</td>
<td>2.16</td>
<td>- + +</td>
</tr>
<tr>
<td>R, S, T, U</td>
<td>0.34</td>
<td>1.49</td>
<td>1.15</td>
<td>- + +</td>
</tr>
</tbody>
</table>

Source: own calculations

To determine the economic potential of Maluku Province more comprehensively, the overlay analysis is done to see the benefits and economic potential in Maluku Province. It is integration between LQ analysis (comparative advantage aspect) and MRP analysis (Growth Ratio of Research area - RPs).

The results of the Overlay analysis calculation year 2010 - 2016 in Table 3 shows the economic sector in Maluku Province, both growth and contribution are classified as follows:

1. Growth (+) and contribution (+) are in the sectors of government administration, defense, mandatory social security schemes and major trade and retail; car and
motorcycle repairs. The sector shows a very dominant activity both from growth and the very large contribution to PDRB and development in Maluku Province.

2. Growth (+) and contribution (-), are in the mining and quarrying sectors, the processing industry, the procurement of electricity and gas, construction, the accommodation and food and beverage and financial services, and insurance. It indicates an activity that is predominantly growing but contributes little. This activity needs to increase its contribution to become a dominant activity.

3. Growth (-) and contribution (+), are found in agriculture, forestry and fisheries, water supply, waste management, waste and recycling, transportation and warehousing, education services, health services and social activities and other services. Those indicate an activity with a small growth but large contribution. This activity may be decreasing.

4. Growth (-) and contribution (-), in the information and communications sector, enterprise services and real estate indicate an activity that is not potential either of the growth or contribution criteria.


The Analytic Network Process (ANP) approach is the right choice in carrying out this study enabling developmental policy formulation of the Maluku Province, but faces the following constraints: 1) the presence of variables difficult to quantify or can not quantify), such as the behavior of actors; 2) the existence of values of subjective variables from consensus judgment, 3) secondary and primary data limitations. Also, the interrelated complexity of these factors requires a comprehensive and holistic understanding to avoid analytical errors in the conclusion or decision.

There were 14 expert respondents in the questionnaire selected by considering the participant’s understanding of the problem. Therefore, the technique of selecting expert respondents is purposive sampling based on expertise or judgment sampling. In this case, the experts selected are those with knowledge, competencies; disciplines; and/or sufficient experience, related to the development of the region and the maritime competitiveness of Maluku Province. The goal through the ANP approach was the development of the Maluku province, while policy concerns for the regional development of Maluku province can be divided into four aspects; strengths, opportunities, weaknesses, and threats. Various indicators and explanation can be seen in Table 4. The next step is to create a network into the Network Process (ANP) modeling framework Analytic as shown in Figure 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Key Words</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Strength</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Economic Growth</td>
<td>Economic growth above the national average</td>
</tr>
<tr>
<td>2</td>
<td>SME’s Growth</td>
<td>The high rate of SME growth is indicated by the significant increase in the number of cooperatives and businesses between years</td>
</tr>
<tr>
<td>3</td>
<td>Aquatic Resources</td>
<td>The availability of abundant marine resources, especially for marine fishery aspect, as well as islands group as a source of maritime wealth which is not owned by other provinces</td>
</tr>
<tr>
<td>4</td>
<td>Biophysical Conditions and Land</td>
<td>Biophysical conditions and the existence of land that can support the development of palawija agriculture, plantations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Marine Tourism</td>
<td>The tendency of increasing interest of tourists, both local and international to marine tourism in Maluku province.</td>
</tr>
<tr>
<td>6</td>
<td>NKRI Defense Fort and National Fish Granary</td>
<td>One more characteristic is that almost the islands are border areas, except the islands of bangka-belitung and have the advantage as a fortress of NKRI and national fish granaries</td>
</tr>
</tbody>
</table>

**B Weaknesses**

1. **Access Between Clusters and Span of Control**
   - The existence of the archipelagic cluster area also resulted in low access between clusters and control ranges.

2. **Beach Abrasion**
   - The appearance of coastal abrasion

3. **Infrastructure**
   - The availability of infrastructure, both in quality and quantity, is still low (roads, major ports and airports), as well as the availability of insufficient and uneven supply of electricity that impacts on sustainable sources of economic growth.

4. **Agricultural Productivity**
   - The agricultural sector which is the focus of most of the working population in Maluku has low productivity levels and has not been able to improve the welfare of society in general

5. **Processing and Cultivation of Fisheries**
   - The fishery sector is still limited to capture fisheries without the processing of fishery products, and the absence of export ports to export superior commodities.

6. **Space Utilization**
   - Utilization of space is still not optimal and there are many areas left behind

7. **Environmental Carrying Capacity**
   - The carrying capacity and capacity of the environment in Maluku is quite alarming

8. **Allocation of Bank Credit**
   - The allocation of bank credit has not yet been channeled, used and identified optimally into the productive sector.

9. **Legal Certainty Related To Land**
   - The problem of the absence of legal certainty, whether customary in relation to land in some areas as well as with investments that become obstacles for large investors.

10. **The Quality of Human Resources**
    - The quality of human resources is still low, particularly related to the development of oil and gas blocks in order to encourage economic growth in Maluku Province. In this regard, Maluku is still among the top 10 provinces in the national HDI achievement.

11. **Public Services**
    - Masih rendahnya pelayanan publik, pemantapan demokrasi, keamanan dan ketertiban masyarakat serta kualitas peradilan.

**C Threat**

1. **Supply of Electrical Energy**
   - The availability of electricity supply is still low

2. **Imported Goods**
   - Negative net exports indicate the fragility of goods entering Maluku province that could kill local production

3. **ASEAN Economic Community (MEA)**
   - ASEAN Economic Community Policy potentially threatens industrial and labor competitiveness in Maluku

4. **Regional Investment**
   - Investor perceptions of the investment climate in Maluku are still low

5. **Ecological Vulnerability**
   - The ecological vulnerability of small islands can affect the development of small islands in Maluku Province

**D Opportunities**

1. **Alignment to Eastern Indonesia**
   - The high commitment of the central government to improve economic growth especially with the development of infrastructure in the Eastern Region. This is reflected in the accelerated development of transportation and energy facilities that can support regional economic activity

2. **Allocation of Village**
   - The existence of village fund allocation policy from the...
<table>
<thead>
<tr>
<th>Funds (Alokasi Dana Desa)</th>
<th>central government has the potential to encourage regional growth, especially in rural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Potential Food</td>
<td>Sago agricultural commodities can be an option. Indeed, the current consumption of sago has diminished, but this is the identity of the Moluccas. Thus, sago can be used for the fulfillment of food consumption or for industry, including for other food commodities.</td>
</tr>
<tr>
<td>4 Tourism Program</td>
<td>Central and local government regulation is still open for tourism &amp; trade sector and central government policy to eastern Indonesia. In addition, island clusters can be a center of growth</td>
</tr>
<tr>
<td>5 Foreign and Domestic Investment in Oil and Gas</td>
<td></td>
</tr>
</tbody>
</table>

**Policy Alternatives**

1. Increased Capacity or Electricity Supply  
2. Program Synchronization  
3. Acceleration of Infrastructure Development  
4. Rural Economic Development  
5. Regional Innovations  
6. Bureaucracy Reform  
7. Spatial Planning and Accelerated Development of Underdeveloped Regions  
8. Increased Availability of Various Foodstuffs  
9. Poverty Alleviation  
10. Improved Access to Education and Health  
11. Destinations of Marine Tourism  
12. Increased Investment and Regional Development
Figure 1. ANP Regional Development Policy of Maluku Province Network
The SWOT-ANP analysis in Table 5 shows that the dominating factor on the development of Maluku Province is the strengths, which reached 37.06% with a value of Kendall's coefficient of concordance or rater agreement amounting to 0.5120. Thus, formulating policies on the development of Maluku Province can be based on factors that maximize the strengths and opportunities that can simultaneously minimize the weaknesses and threats. Meanwhile, the most influential policy on the development of the Maluku Province is the accelerated development of infrastructure by 18 percent with a fairly high level of compliance (Kendall's coefficient of concordance) of 0.8370. This indicates that the level of agreement or the conformity of opinion of the respondents is big giving high confidence, whereas if the opinion of the respondents has a lower level of conformity value, then the respondent's answers are more varied. Moreover, the consistency ratio shows that each priority value shows consistent results (below 10 percent).

**Table 6. Policy Priorities of Regional Development of Maluku Province**

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Investment and Regional Development</td>
<td>9</td>
</tr>
<tr>
<td>Bureaucracy Reform</td>
<td>7</td>
</tr>
<tr>
<td>Destinations of Marine Tourism</td>
<td>5</td>
</tr>
<tr>
<td>Acceleration of Infrastructure Development</td>
<td>1</td>
</tr>
<tr>
<td>Increased Availability of Various Foodstuffs</td>
<td>4</td>
</tr>
<tr>
<td>Increased Capacity or Electricity Supply</td>
<td>11</td>
</tr>
<tr>
<td>Improved Access to Education and Health</td>
<td>3</td>
</tr>
<tr>
<td>Poverty Alleviation</td>
<td>2</td>
</tr>
<tr>
<td>Program Synchronization</td>
<td>12</td>
</tr>
<tr>
<td>Regional Innovations</td>
<td>8</td>
</tr>
<tr>
<td>Rural Economic Development</td>
<td>10</td>
</tr>
<tr>
<td>Spatial Planning and Accelerated Development of Underdeveloped Regions</td>
<td>6</td>
</tr>
</tbody>
</table>
The acceleration of infrastructure development becoming a priority policy for the development of Maluku Province is the right decision, considering that Maluku province consists of many islands. Thus, policies through the acceleration of infrastructure are essential for connectivity and fisheries and marine development as well as tourism as the main sectors. Therefore, the acceleration of infrastructure development should take precedence, ranging from the construction of road infrastructure, bridges, ports, to the airport. The more connected the areas in Maluku Province, the cheaper and easier the mobility of goods and/or people, including transaction costs are. More details can be seen in Table 6 above.

5. CONCLUSION

There are several findings from this study. First, this study found strong evidence that the Province of Maluku have 8 categories of economic sector that has the base categories, which includes agriculture, forestry and fisheries; water supply, waste management and recycling; major trade and retail and auto-motorcycle repair; transportation and warehousing; government administration, defense and compulsory social security schemes; education services; health services and social activities; and other service categories. The growth ratio calculation (MRP) shows that the sector with the highest average Regional Growth (RPs) in Maluku province is the Mining and Quarrying sector. This value indicates that the growth of Mining and Quarrying sector in Maluku province is higher than at the National level. Furthermore, the overlay analysis indicate that the administrative sectors of government, defense, compulsory social security schemes and major trade and retail; car and motorcycle repairs are the most dominant activities both of growth and of the large contribution to PDRB and development in Maluku Province. Meanwhile, the information and communications sector, corporate and real estate services show an unlikely activity, both from growth and contribution criteria.

Second, the analysis of SWOT-ANP showed that the most influential factor on the development of Maluku Province is the strengths, namely economic growth, high rate of growth of SMEs, the availability of water resources, biophysical condition and the presence of land, marine, and bastion of Indonesia and national fish resource. Therefore, formulating development policies of Maluku can be based on factors that can maximize the strength and opportunities and simultaneously minimize the weaknesses and threats. Furthermore, the most prioritized developmental policy of Maluku Province is the acceleration of infrastructure development. Thus, policies through the acceleration of infrastructure are essential for connectivity and fisheries and marine development as well as tourism as the main sectors. Therefore, the acceleration of infrastructure development should take precedence, ranging from the construction of road infrastructure, bridges, ports, to the airport. The more the areas are connected in Maluku Province, the easier and cheaper the mobility of goods and/or people, including transaction costs will be.

Reference


