PEMEKARAN WILAYAH (REGIONAL DIVISION) AND THE DEVELOPMENT OF CENTRALS OF ECONOMIC GROWTH (STUDY AT BAUBAU CITY OF SOUTH EAST SULAWESI PROVINCE AND TASIJKMALAYA CITY OF WEST JAVA PROVINCE)

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ABSTRACT

The research was conducted at Baubau and Tasikmalaya cities. Those cities are small cities resulted from regional autonomy in 2001 and has developed into a central of economic growth at Southeast Sulawesi Islands, Southeast Sulawesi Province and East Priangan, West Java Province. The research aimed to analyze the development of regional economic structure and superior sector which was the economic competitiveness of the regional, analyze the economic interaction and attractiveness of Baubau and Tasikmalaya cities toward their hinterland areas. Analysis method and research result showed that result from Klassen Typology Analysis of Southeast Sulawesi Islands indicated that Baubau, Wawatobi Regency and North Buton Regency were belong to the classification of fast growing regions. Muna Regency was belong to developed region but under pressure, and Buton and Bombana Regencies were belong to relatively underdeveloped region. Result of Klassen Typology Analysis of East Priangan region indicated that Tasikmalaya was belong to the classification of fast growing region, its hinterland areas, i.e., Tasikmalaya, Garut, and Ciamis Regencies and Bandjar City and Pangandaran Regency, were belong to relatively underdeveloped region. Result of Entropy Diversity Index and Location Quotient (LQ) analysis, Southeast Sulawesi Islands and East Priangan showed an average of IDE and LQ of Baubau and Tasikmalaya Cities was bigger than their hinterland. Result of gravity analysis of Southeast Sulawesi Islands indicated strong regional economic interaction/attractiveness between Baubau City and Buton Regency and Muna Regency indicated by the average of gravity value index that bigger than North Buton Regency; whereas, the regional economic interaction and attractiveness of Wakatobi and Bombana Regencies was very weak indicated by small gravity value. Result of gravity index of East Priangan indicated that there was strong regional economic interaction and attractiveness between Tasikmalaya City and Tasikmalaya Regency and Ciamis Regency indicated by big average of gravity value index; however, Tasikmalaya City and Garut Regency, Bandar City and Pangandaran Regency had a very weak regional economic interaction and attractiveness indicated by small gravity index.

Keywords: regional autonomy, klassen typology, entropy diversity, location quotient, gravity model, growth center.

1. INTRODUCTION

The prevailing of Act No. 22, 1999 on regional government with central point of decentralization and regional autonomy has given an opportunity for regionals to do pemekaran wilayah (regional division). The strong demand of regional division from regionals was encouraged by the reality of centralization governmental structure (centrality), regional disparity, injustice and inequality in term of regional equality and on one side, there was an acceleration of development and manufacture accumulation and slow development process on the other side (Booth, 2011 and Kuncoro, 2002).

According to Butt (2010), political change in Indonesia and monetary crisis in 1998 has changed Indonesia from a centralized country to one of democratic and decentralized country. Charras (2005) in Booth (2011) stated that decentralization process and the addition of new provinces, regencies and lower local governmental units outside Java was the reaction toward inequality and injustice; the change occurred as a result of complexity of political, social-cultural and economic forces. Through decentralization and regional autonomy polices, pemekaran wilayah
(regional division) is viewed as one of regional development forms and it is expected to decrease regional disparity and to balance of inter-regional development and growth (Mut’ali, 2011).

Numbers of provinces, regencies/cities was before reformation in 1999, in Indonesia, there were 26 provinces, 234 regencies and 59 cities with total of 319. At that time, the formation of provinces, regencies/cities was referred to Act No. 5, 1974 on Principles of Local Government. However, since reformation in 2000 or since the prevailing of Act No. 22, 1999 on Local Government, the number of province/regency and city has highly increased. Until 2013, the number of province was 34, regency was 409 and city was 93 with total of 536. Within 15 years the number of autonomy regional resulted from division (DOHP) has increased with addition of 8 (eight) provinces, 175 regencies and 34 cities with total 217 (Kuncoro 2012, Ratnawati 2010, Kemendagri 2013).

Decentralization and regional autonomy policies had encouraged the formation of province, regency and city as a region. The situation created differences among provinces, regencies and cities resulted from regional division. There was a region with people/activities concentrated in an area and there was a region that less concentrated. Tarigan (2005) stated that a concentrated area is known as a city, trade center, industrial center, industrial node, urban or nodal areas. Regions outside the concentration center are named as inland, agricultural area, rural area or the hinterland. Sutikno et. al (2007) stated that phenomenon of nodal areas formation occurs not only in provincial level but also in regency/city where center of economic activity usually is the city. Large regencies divide their areas administratively in two, city (municipal) and regency. The city will then be made as the center of economic activity (center of growth) and the regency is the hinterland. Hirschman (1958) in Dawkins (2003) stated that polarized development could give benefit to growth region and its hinterland.

Baubau and Tasikmalaya Cities were the result of pemekaran wilayah (regional division) in 2001 from Buton Regency and Tasikmalaya Regency. The division gave opportunity to encourage and develop economy in the area; therefore, it gave spread effect and became the generator for economic activities in their hinterland. As a city resulted from pemekaran wilayah (regional division), within 10 years – 2003, 2007, 2009-2013 – the average PDBR per capita of Baubau City was Rp. 5,498,911,79 million, which is bigger than Buton Regency of Rp. 2,856,250,12 million, Muna Regency Rp. 4,159,772,19 million, Wakatobi Regency of Rp. 2,698,208,54 million and Bombana Regency of Rp. 3,095,969,85; however, it is lower than North Buton Regency of Rp. 694,7994,67 million. As well as Tasikmalaya city, the average PDBR per capita for ten years is Rp. 6156109,12 million, which is bigger than its hinterland: Tasikmalaya Regency of Rp. 3,209,386,32 million, Garut Regency of Rp. 4,628,514,29 million, Ciamis Regency of Rp. 4,740,458,93 million and Banjar Regency of Rp. 4,333,575,71 million (Figure 1).

![Development of PDBR Per capita of Regencies/Cities Southeast Sulawesi Islands in 2003, 2007 and 2009-2013](image1)


Figure 1. The development of PDBR per capita of Regencies/Southeast Sulawesi Islands and East Priangan and their hinterland in 2003, 2007 and 2009-2013.

Economic development is one of indicators on whether a region is developing or developed. Refer to the average of economic growth of Baubau City in 2003, 2007, 2009-2013 of 8.11%, it is bigger than its hinterland: Buton and Muna Regencies of 7.53% and 7.22%, respectively; however, it is lower than North Buton Regency of 8.61%, Wakatobi of 9.88% and Bombana Regency 8.16% (Figure 2).
The following figure 3 shows the development of Gross Regional Domestic Product based on Constant Price (PDRB ADHK) 2000 of Baubau City for 10 (ten) years since the pemekaran wilayah (regional division) in 2001. In the beginning of division in 2003, PDRB ADHK of Baubau City was lower than Muna and Buton Regencies but bigger than North Buton, Wakatobi and Bombana Regencies. In 2007, 2009-2013 it experienced fast development compare to its hinterland although the development was still lower than Muna Regency.

Figure 3 also shows the development of Gross Regional Domestic Product based on Constant Price (PDRB ADHK) in 2000 of Tasikmalaya City in 10 years since the division in 2001. In the early year of division in 2003 to 2007 and 2009-2013, PDRB ADHK growth of Tasikmalaya City was very slow compare to Garut, Ciamis and Tasikmalaya Regencies; however, it was bigger than Banjar City and Pangandaran Regency.

Refer to the economic growth, the income per capita and PDRB ADHK in 2000 of Baubau and Tasikmalaya Cities experienced fast economic growth although compare to its three hinterland regencies, Tasikmalaya City has slow growth. In general, however, it shows that decentralization and regional development of economic growth of Tasikmalaya City is 5.64%, which is bigger than its hinterland: Tasikmalaya Regency of 4.18%, Garut Regency of 4.75%, Ciamis Regency of 4.88%, Banjar Regency of 5.07%, and Pangandaran Regency of 4.75%. It shows that decentralization and regional autonomy policies gave positive and significant impact on economic development of Baubau and Tasikmalaya Cities.

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autonomy policies applied by central government in 2001 to Baubau and Tasikmalaya Cities gave significant impact to the development of regional economy of Baubau and Tasikmalaya Cities; especially, it is hoped that it can give spread effect for economic development of its hinterland.

The above data shows that the economic position of Baubau and Tasikmalaya Cities is quite strategic for their hinterlands; therefore, it is a requirement to analyze the potential of Baubau and Tasikmalaya Cities as central of economic growth for

2. LITERATURE REVIEW

2.1. Pemekaran Wilayah, Decentralization and Regional Autonomy

According to Ferrazzi (2007) in Ratnawati (2010) pemekaran wilayah (regional division) can be seen as part of regional arrangement process or territorial reform or administrative reform, which is management of the size, shape and hierarchy of local government units for the purpose of achieving political and administrative goals. Regional arrangement, in general, consists of regional division, corporation and removal. Tryatmoko (2010) stated that territorial reform policy is the preference of some countries. There are three variances of the policy: First, regional proliferation, which is a policy chosen by developing countries (Pakistan, Philippine, Nigeria, Uganda, Kenya) that prioritizing geographic proximity. Second, regional amalgamation, which is a policy chosen by developed countries (Victoria-Australia, Japan, Canada, Sweden) oriented to economic principle (efficiency) in government implementation. Third, a mix of pemekaran (division) and corporation in which a country that following this policy is adjusting with the existing political and economic condition. The selection of territorial reform through pemekaran wilayah (regional division) is not depended on the form of the country, federal or unity. In addition to the term pemekaran wilayah as territorial reform according to Ferrazzi, some experts use other terms pemekaran wilayah as the proliferation / regional blossoming / new formation region (Kimura 2010), territorial splits (Firman 2013 and Booth 2011) all refer to the process of splitting / separation from one region into two regions.

From decentralization point of view, pemekaran wilayah (regional division) is the implementation of decentralization principle (Ratnawati, 2010). Cheema and Rondinelli (2007) defined decentralization as the transfer of authority, responsibility, and resources-through deconcentration, delegation, or devolution-from the center to lower levels of administration. They stated that the present government implemented three forms of decentralization. First, deconcentration, sought to shift administrative responsibilities from central ministries and departments to regional and local administrative levels by establishing field offices of national departments and transferring some authority for decision making to regional field staff; Second, devolution aimed to strengthen local governments by granting them the authority, responsibility, and resources to provide services and infrastructure, protect public health and safety, and formulate and implement local policies ; Third, delegation, national governments shifted management authority for specific functions to semiautonomous or parastatal organizations and state enterprises, regional planning and area development agencies, and multi- and single-purpose public authorities. Due to the principle, regional autonomy and administrative region are known (Kuncoro 2004).

Theoretically, autonomy is originated from Greek Language “autonomous” means self-government (auto = self, nomus = government), which is an autonomy to arrange and manage its own household. It also can be stated as full submission for autonomy region to implement their household. According to Sjafrizal (2008) the definition of autonomy is related to two main points: authority to create own laws and freedom for self-government. Hidayat (2000) in Agusniar (2006) stated that there are three main reasons why regional autonomy is needed. First, political equality, which is to increase political participation in regional level and it is important in increasing democratization in managing a state. Second, local accountability, which is to increase the ability and responsibility of regional government to create right and aspiration of regional societies in order to increase regional economic growth and social prosperity. Third, local responsiveness, which is to increase the accountability of regional government toward social and economic problems in their region.

2.2. Growth Center

The basic concept of growth center is based on growth pole theory that firstly proposed by Francois Perroux (1955) through Pole de Croissance. The assumption from Perroix (1955) was that growth does not appear everywhere at the same time; it appears at points or poles of growth with varying intensity; it spreads along various channels and with differing
overall effects on the whole economy (Parr, 1999; Serra, 2003). The basic theory of growth pole is that economic activities in an area tend to concentrated in one local point (center). Further, Perroux in Monsted (1974) defined growth pole as a field of forces, economic space consists of centers (pole and foci) from which centrifugal forces emanate and to which forces are attracted. Each center being a center of attraction and repulsion has its proper field, which is a set in the field of all other centers.

Basic theory of growth pole by Higgins (2005) defined that the growth pole is a set (of economy activities) that has to introduce the growth of another set. The existence of a group of economic activities will grow other economic activities. However, the influence of economic activities will lessen the further they are from the growth center. A center can be stated as growth center and the hinterland influenced by the center is called influenced areas. According to Tarigan (2005), center of growth can be defined by two ways. First, functionally, a growth center is explained as a concentrated location of a group of businesses or industrial branches that due to the dynamic element of its relationship has able to stimulate economic life inside and outside (its periphery area). Second, geographically, a growth center is a location with many facilities and easiness thus became a pole of attraction with various economic activities and people come to utilize the facilities even though there are no interactions among those businesses.

A city is said as a growth center if it has four characteristics of growth center (Tarigan, 2005; Hansen, 1972, and Adisasmita, 2008), i.e.: 1) there are internal relationship from various activities with economic values: there exists a relationship between one sector to another; therefore, the growth of one sector will encourage other sector; 2) the existence of multiplier effect: the existence of mutually related and supported sectors will create multiplier effect; 3) the existence of geographical concentration from various sectors or facilities that can create efficiency among mutually needing sectors and increase attractiveness of the city; 4) encourage its periphery areas: it means that a city and its periphery areas has harmonious relationship. The city needs raw material from its periphery area and provides various needs for the development of its periphery areas.

Another concept related to the growth center is nodal regional concept that view a region as a dichotomy (divided into two parts) based on the assumption that an area is assumed as “a living cell” having plasma and nuclear. The nuclear (center of node) is a center of service and/or housing and the plasma is the periphery or hinterland and having certain natures and functional relationship (Rustiadi et al, 2009). (Richardson, 1969) in (Rustiadi et al, 2009) stated about concept of nodal area by focusing more on the controlling role or the influence of a center or node and the dependence relationship between center and its surrounding elements instead of border line. Similar concepts to Parroxy’s growth center theory used by other authors, such as core region, growth areas, growth points, growth and development poles, growth center, is principally encouraged the development of an area (Nurzaman, 2012) and has included the geographic and location dimension; whereas, concept of growth center has no specific geographic dimension.

3. RESEARCH METHODOLOGY

3.1. Research Location

Republic of Indonesia consists of 34 provinces, 409 regencies and 93 cities. The time zone is divided into three western Indonesia (WIB), central Indonesia (WITA) and eastern Indonesia (WIT). However, the development area is divided into two areas: western area (KBI) consists of Sumatera and Java Islands and eastern area (KTI) consists of Borneo, Sulawesi, Maluku, Nusa Tenggara and Papua Islands.


Figure 4. The map of the Republic of Indonesia based on area Regional of Western Indonesia (KBI) and Eastern Indonesia (KTI) and research locations.
The research was conducted in two cities resulted from regional division in 2001: Baubau City in Eastern Indonesia with characteristic of coastal/islands city and Tasikmalaya City in Western Indonesia with characteristic of terrestrial city and both cities have characteristic as a growth center. The selection of both location was aimed to find out the potential of the cities resulted from regional division to be developed as center of economic growth.

Source: Map of Southeast Sulawesi and West Java Provinces from www.google.com and Bappeda (Regional Development Planning Board) of Southeast Sulawesi and West Java Provinces, 2013.

Figure 5. Map of Research Location of Southeast Sulawesi Islands (Baubau City) and East Priangan (Tasikmalaya City).

3.3. Analysis Used

3.3.1. Klassen Typology Analysis

Klassen Typology divides a region based on two main characters: economic growth as vertical axis and regional income per capita/PDRB ADHK as horizontal axis and classifies a region into four classifications (Safrizal, 1997; Kuncoro, 2013).

Table 1. Classification Matrix of Regency/City Based on Klassen Typology

<table>
<thead>
<tr>
<th>PDRB Per capita (y)</th>
<th>( y_{i} &gt; y )</th>
<th>( y_{i} &lt; y )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( r_{i} &gt; r )</td>
<td>high growth but low income</td>
<td>high growth, high income</td>
</tr>
<tr>
<td>( r_{i} &lt; r )</td>
<td>low growth and low income</td>
<td>high income but low growth</td>
</tr>
</tbody>
</table>

Description: \( y_{i} \) is the average of PDRB (Gross Regional Domestic Product) per capita of regency/city \( i \); \( y \) is the average of PDRB per capita of regency/city; \( r_{i} \) is the average of economic growth rate of regency/city \( i \); \( r \) is the average of economic growth rate of regency/city.

3.3.2. Entropy Diversity Index Analysis (IDE)

Entropy Diversity Index was used to measure whether the economy of a region is growth/developed or not. If the result of the analysis is close to 1, the area is developing and if the result is close to 0 the area is not developing. The higher the value of its entropy, a region is considered as developing and vice versa (Pribadi et al, no year). The general equation for entropy diversity index calculation is:

\[
S = -\sum_{i=1}^{n} \sum_{j=1}^{n} p_{ij} \ln p_{ij}
\]

where: \( S = \) entropy value; \( p_{ij} = \) ratio value between \( j^{th} \) economic activity/sector and total activities/\( i^{th} \) economic sector; \( i = \) category of \( i^{th} \) economic activity/sector; \( j = \) category of \( j^{th} \) region (regency/city); \( n = \) total economic activity/sector.

3.3.3. Location Quotient (LQ) Analysis

Location quotient (LQ) analysis is one of indirect measurement methods to find out whether a sector in a region is a basis or non-basis sector (Budiarsnomo, 2001). Riyadi and Bratakusumah (2004) stated that location quotient (LQ) analysis is aimed to find out general description on the ability of development sectors in a region in supporting its development process and the ability of development sectors in a region compare to development sector in a bigger
region. Formula of Location Quotient (LQ) method is as follow:

\[ LQ_{ij} = \frac{X_{ij}}{X_i} / \frac{X_j}{X} \]

where: \( LQ_{ij} \) is lq value for certain sector in region i; \( X_{ij} \) is a value of certain sector in regency/city i; \( X_i \) is a value of total sector in regency/city i; \( X_j \) is a value of certain sector in province; \( X \) is a value of total sector in province.

The measure of Location Quotient Analysis according to Bendavid-Val in Kuncoro (2002) is: LQ > 1 shows basis/superior sector since it is able to increase and develop the region and there are surplus that marketed to other regions; LQ = 1 shows that the sector is only able to fulfill local need; LQ < 1 shows that the sector is not a basis sector since it is unable to fulfill local need and there is tendency to import from other regions.

3.3.4. Gravity Model Analysis

The basic concept of this analysis is discussing on measure and distance between two places: growth center and its hinterland (Daldjoeni, 2006 in Ardila 2012). The closer the distance between those two locations the bigger is the interaction and attractive force between both; on the contrary, the further the distance between those locations, the smaller is the attractive force between both locations (Setiono, 2011). Equation used is following (modified from Isard (1976) and Sangaran (2012):

\[ I_{ij} = \frac{(W_i P_j)(W_j P_i)}{d_{ij}^b} \]

where: \( I_{ij} \) is special interaction between region i (center = Baubau and Tasikmalaya City) and region j (hinterland; Buton, North Buton, Wakatobi, Muna, Bombana, Tasikmalaya, Ciamis and Garut Regencies, Banjar City, and Pangandaran Regency); \( W_i \) is PDRB per capita of region i (center); \( W_j \) is PDRB per capita of hinterland; \( P_i \) is total population of region i (center = Baubau and Tasikmalaya City); \( P_j \) is total population of the hinterland (Buton, North Buton, Wakatobi, Muna, Bombana, Tasikmalaya, Garut, Ciamis, Banjar City, and Pangandaran Regency); \( d_{ij} \) is distance between region i (center) and region j (hinterland); b is constant value of 2.

4. RESULT AND DISCUSSION

4.1. Regional Classification and the Development of Regional Economic Structure Development

4.1.1. Classification of Regency/City (Klassen Typology Analysis)

Research result using data in 2009-2013 shows that the average of economic growth rate of twelve regencies/cities in Southeast Sulawesi Province showed 9.22 percent and the average of PDRB ADHK in 2002 was Rp. 1.058,53 (Figure 6). Result of Klassen Typology Analysis of 12 (twelve) regencies/cities in Southeast Sulawesi Province showed the position of Baubau and its two hinterland, Wakatobi and North Buton Regencies, were belong to fast growing regency; Muna Regency was belong to the classification of developed region but under-pressure and Buton and Bombana Regencies were belong to the classification of relatively underdeveloped region. The position of Baubau City as fast growing region was due to the high average of economic growth, which was 9.35% compare to its two hinterlands within the same classification. Wakatobi Regency showed average of economic growth of 10.06% that bigger than Baubau City; however, North Buton Regency had average of economic growth of 9.3% that lower than Baubau City. Other regencies, Muna, Buton and Bombana Regencies had lower average of economic growth than Baubau City, which was 7.36%, 8.93% and 8.38%, respectively. Regarding the growth rate of PDRB ADHK in 2000, for three regions within fast growing region, the rate was Rp 840.18 billion for Baubau City, which was bigger than Wakatobi Regency of Rp. 288,81 billion and North Buton Regency of Rp. 400,41 billion. Comparing to two regions with classification of relatively underdeveloped region, Baubau has bigger average of PDRB ADHK with Buton Regency of Rp. 779,99 billion and Bombana Regency of Rp. 459.20 billion. However, comparing average of PDRB ADHK of Baubau City with Muna Regency, which is belong to classification of developed region but under-pressure, Muna Regency has bigger average of Rp. 1.203,55 trillion (Figure 6).

Figure 6. Klassen Typology of Regency/City in Southeast Sulawesi and West Java and the position of Baubau and Tasikmalaya Cities and their hinterland in Klassen Typology.

Figure 6 shows the result of Klassen Typology Analysis of 27 (twenty seven) regencies/cities in West Java Province in 2009-2013. The result indicates the average of economic growth of 5.38 percent and average of PDRB ADHK 2000 of Rp. 12.236,09 (Figure 6). The result also shows the position of regencies/cities in East Priangan, including Tasikmalaya City and its hinterland (Tasikmalaya, Garut, and Ciamis Regencies, Banjar City and Pangandaran Regency) in Klassen Typology. The position of Tasikmalaya City was within the classification of fast growing region; whereas its hinterlands were within the classification of relatively underdeveloped region. The position of Tasikmalaya city as fast growing region was due to the relatively high average of economic growth of 5.81%, which was bigger than the average of Tasikmalaya Regency, Garut Regency, Ciamis Regency, Banjar City and Pangandaran Regency of 5.16%, 5.02%, 5.27% and 2.85%, respectively. Based on the average of PDRB ADHK, however, Tasikmalaya City had average of Rp. 4,120,12 trillion that relatively lower than Tasikmalaya Regency of Rp. 5,764,33 trillion, Garut Regency of Rp. 11,721,43 trillion and Ciamis Regency of Rp. 7,823,24 trillion; yet, it was bigger than the average of Banjar City of Rp. 791,88 million and Pangandaran Regency of Rp. 2,257,18 trillion.

4.1.2. The Development of Regional Economic Structure

4.1.2.1. Entropy Diversity Index (IDE) Analysis

To analyze the development of regional economic structure of Baubau and Tasikmalaya Cities and their hinterland, Entropy Diversity Index Analysis (IDE) was used. Result of IDE analysis on the development of PDRB sectors of Baubau City and its hinterland in 2003, 2007, 2009 and 2013 shows that the average entropy value of Baubau City (0.85) was bigger than its hinterland: Buton Regency (0.80), North Buton (0.73), Wakatobi Regency (0.82), Muna Regency (0.81) and Bombana (0.43). It means that the economic sector of Baubau was more developing and it was related to the strategic position of Baubau City as a buffer city that able to provide and supply goods for its hinterland. In addition, the development of economic sectors of Baubau City, such as electricity, gas and clean water, buildings, trade, hotel and restaurant, transportation and communication, finance, rent service, financial service and other services has given big contribution to PDRB of Baubau City. On the other hand, it can be seen that development and economic activities were advancing more and developing in Baubau City (Figure 7).
Figure 7. Entropy Diversity (IDE) value of Baubau and Tasikmalaya Cities and their hinterland in 2003, 2007, 2009 and 2013.

Figure 7 shows that between year 2003, 2007, 2009 and 2013, the average of entropy index of Tasikmalaya City (0.85) was bigger than its hinterlands: Tasikmalaya Regency (0.71), Garut Regency (0.67), Ciamis Regency (0.81), Banjar City (0.83) and Pangandaran Regency (0.74). It shows that economic sectors of Tasikmalaya city was more developing and it was due to the strategic position of Tasikmalaya City as a buffer city, especially in East Priangan region that able to provide and supply goods for its hinterlands. In addition, the development of economic sector of Tasikmalaya City, such as manufacture industries, electricity, gas and clean water, buildings, trade, hotel and restaurant, transportation and communication, finance, rent and finance services has given big contribution to PDRB of Baubau. On the other hand, it shows that development and economic activities were more advancing and developing in Tasikmalaya City.

4.2. Leading/Superior Sector of Regional Economic

4.2.1. Location Quotient (LQ) Analysis

Result of Location Quotient (LQ) Analysis of sectors in regional economy of Baubau City and its hinterlands (Buton, North Buton, Wakatobi, Muna and Bombana Regencies) toward economic sectors of Southeast Sulawesi Province in 2009-2013 and Tasikmalaya City and its hinterlands (Tasikmalaya, Garut, Ciamis, Kota Banjar and Pangandaran Regencies) toward economic sectors of West Java Province in 2009-2013 is presented in Table 2.

Based on Table 2 below, result of LQ analysis of regencies/cities of Southeast Sulawesi Islands consisting of Baubau City and its hinterlands (Buton, North Buton, Wakatobi, Muna and Bombana Regencies) in 2009 and 2013 are as follow: Baubau City: there were 6 (six) sectors with average of LQ>1 i.e.: Building (2.46), services (1.96), electricity and clean water (1.32), trade, hotel and restaurant (1.28), transportation and communication (1.27) and financial sector, rent and services (1.12); they were the basis sectors. Whereas, three sectors with LQ value < 1 i.e.: manufacture industries sector (0.45), agriculture (0.28) and mining and digging (0.10) were categorized as non-basis sectors. Buton Regency: there were 3 (three) sectors with average of LQ>1 i.e.: services sector (1.45), agriculture (1.24) and mining and digging sectors (1.06); these sectors were basis sectors. Whereas, 5 (five) sectors with LQ value <1 i.e.: finance, rent and services (0.90), trade, hotel and restaurant (0.89), electricity and clean water (0.56), building (0.55), transportation and communication (0.32) were categorized as non-basis sectors and there was one sector, manufacture industries (1.00) with potential to be a basis sector. North Buton Regency, there were 3 (three) sectors with average LQ value >1 i.e.: agriculture (1.54), service (1.34) and building sectors (1.21); these sectors were the basis sectors. Whereas 6 (six) sectors with LQ<1 i.e.: manufacture industries sector (0.98), trade, hotel and restaurant (0.68), finance, rent and services (0.63), electricity and clean water (0.56), transportation and communication (0.28) and mining and digging sectors were categorized as non-basis sector. Wakatobi Regency: there were 5 (five) sectors with average LQ value >1 i.e.: services (1.74), finance, rent and services (1.25), trade, hotel and restaurant (1.06), agriculture (1.04) and electricity and clear water (1.02); these sectors were the basis sectors. Whereas, 4 (four) sectors with LQ value <1 i.e.: building (0.79), mining and digging (0.72), manufacture industries (0.67), and transportation and communication (0.36) were categorized as non-basis sector. Muna Regency: there were 3 (three) sectors
with average LQ>1 i.e.: services (1.58), trade, hotel and restaurant (1.29), and agriculture (1.07); those sectors were basis sectors. Whereas, 6 (six) sectors with LQ<1 i.e.: finance, rent and service (0.94), building (0.90), manufacture industries (0.76), electricity and clean water (0.46), transportation and communication (0.43) and mining and digging (0.38) were categorized as non-basis. **Bombana Regency**: there were 3 (three) sectors with average LQ>1 i.e.: agriculture (1.57), building (1.34) and services (1.17); those sectors were the basis sectors. Whereas, 6 (six) sectors with LQ<1 i.e.: mining and digging (0.86), finance, rent and service (0.78), trade, hotel and restaurant (0.64), electricity and clean water (0.33), manufacture industries (0.28) and transportation and communication (0.23) were categorized as non-basis.

Table 2. *Location Quotient (LQ)* Analysis of PDRB according to field of business based on constant price in 2000 on regencies/cities of Southeast Sulawesi Province and East Priangan in 2009 and 2013

<table>
<thead>
<tr>
<th>Sector/Field of Business</th>
<th>The Development of Average Sectoral LQ of Regencies/Cities Southeast Sulawesi Islands</th>
<th>The Development of Average Sectoral LQ of Regencies/Cities East Priangan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year</td>
<td>Average LQ</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2009/2013</td>
<td>0.27</td>
</tr>
<tr>
<td>Mining and Digging</td>
<td>2009/2013</td>
<td>0.10</td>
</tr>
<tr>
<td>Manufacture industries</td>
<td>2009/2013</td>
<td>0.54</td>
</tr>
<tr>
<td>Electricity, Gas, and Clean Water</td>
<td>2009/2013</td>
<td>1.32</td>
</tr>
<tr>
<td>Building</td>
<td>2009/2013</td>
<td>1.24</td>
</tr>
<tr>
<td>Trade, Hotel and Restaurant</td>
<td>2009/2013</td>
<td>1.28</td>
</tr>
<tr>
<td>Transportation and Communication</td>
<td>2009/2013</td>
<td>1.27</td>
</tr>
<tr>
<td>Finance, Rent and Financial Services</td>
<td>2009/2013</td>
<td>1.12</td>
</tr>
<tr>
<td>Services</td>
<td>2009/2013</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Source: Result of Location Quation (LQ) Analysis. Data was processed from BPS of Baubau City and Regencies: Buton, North Buton, Wakatobi, Muna and Bombana Regency (2009-2014); BPS of Tasikmalaya City and Regencies: Tasikmalaya, Garut, Ciamis, Banjar City, Pangandaran Regency and West Java Province, 2009-2014.

Description: Colored numbers are basis sectors of regencies/cities in Southeast Sulawesi Islands and East Priangan.

Based on Table 2, result of Location Quotient (LQ) Analysis of regencies/cities in East Priangan consisting of Tasikmalaya City and its hinterlands (Tasikmalaya, Garut, and Ciamis Regencies, Banjar City and Pangandaran Regency) in 2009 and 2013 are as follow: **Tasikmalaya City**: there were 5 (five) sectors with average LQ>1 i.e.: building (3.12), finance, rent and service (3.08), services (1.75), transportation and communication (1.66) and trade, hotel and restaurant (1.44); those sectors were categorized as basis sector. Whereas, 4 (four) sectors with LQ<1 i.e.: electricity and clean water (0.73), agriculture (0.60), manufacture industries (0.42), and mining and digging (0.00) were categorized as non-basis sector. **Tasikmalaya Regency**: there were 4 (four) sectors with average LQ>1 i.e.: agriculture (3.47), services (2.19), finance, rent and services (1.13), trade, hotel and restaurant (1.05); those sectors were categorized as basis sector. 5 (five) sectors having average LQ<1 i.e.: transportation and communication (0.96), electricity and clean water (0.45), building (0.19), manufacture industries (0.18), and mining and digging (0.11) were categorized as non-basis. **Garut Regency**: there were 4 (four) sectors with average LQ>1 i.e.: agriculture (3.65), services (1.42), trade, hotel and restaurant (1.27) and finance, rent and services (1.09); those sectors were categorized as basis sector. Whereas, 5 (five) sectors with average LQ<1 i.e.: building (0.77), transportation and communication (0.58), electricity and clean water (0.25), building (0.19), manufacture industries (0.17), and mining and digging (0.06) were categorized as non-basis sector. **Ciamis Regency**: there were 6 (six) sectors with average LQ>1 i.e.: services (2.41), agriculture (2.30), transportation and communication (1.67), finance, rent and services (1.59), building (1.40) and trade, hotel and restaurant (1.23); those sectors were categorized as basis sector. Whereas, 3 (three) sectors with average LQ<1 i.e.: electricity and clean water (0.30), manufacture industries (0.18) and mining and digging (0.16) were categorized as non-basis sector. **Banjar City**, result of Location Quotient analysis shows that there were 6 (six) sectors with average LQ>1 i.e.: services (2.18), finance, rent and services (1.89), trade, hotel and restaurant (1.56), agriculture (1.49), building (1.47), agriculture (1.57), building (1.34) and services (1.17); those sectors were the basis sectors. Whereas, 6 (six) sectors with LQ<1 i.e.: mining and digging (0.86), finance, rent and service (0.78), trade, hotel and restaurant (0.64), electricity and clean water (0.33), manufacture industries (0.28) and transportation and communication (0.23) were categorized as non-basis.
and transportation and communication (1.46) and those sectors were categorized as basis sector. Whereas, 3 (three) sectors with average LQ<1 i.e.: electricity and clean water (0.45), manufacture industries (0.28), and mining and digging (0.13) were categorized as non-basis sector. **Pangandaran Regency:** the calculation of LQ from 2011 to 2013 shows that there were 5 (five) sectors with average LQ>1 i.e.: agriculture (2.80), services (2.43), trade, hotel and restaurant (1.44), finance, rent and financial services (1.28) and building (1.15) and those sectors were categorized as basis sector. 4 (four) sectors with average LQ<1 i.e.: mining and digging (0.33), electricity, gas and clean water (0.32), transportation and communication (0.32), and manufacture industries (0.13) were categorized as non-basis sector. Sectors with average LQ value > 1 were assumed as sectors that able to fulfill local need and had surplus product to be developed and exported. In addition, the sectors were sectors that drive and encourage regional economic growth and development and gave big contribution of PDRB of regency/city.

Figure 8. The Dominant Sectors and average Sectoral Location Quotient (LQ) of Regencies/Cities in Southeast Sulawesi Islands (Baubau City, Regencies: Buton, North Buton, Wakatobi, Muna and Bombana Regencies) and East Priangan (Tasikmalaya City, Regencies: Tasikmalaya, Garut, Ciamis, and Pangandaran Regencies and Banjar City) in 2009 and 2013

**Description:** Agri = agriculture; M&D = mining and digging; MI = manufacture industries; EGCW = electricity, gas and clean water; Build = building; THR = trade, hotel and restaurant; T&C = transportation and communication; FRFS = finance, rent and financial services; Serv = services.

Figure 9 indicates sectors in Southeast Sulawesi Islands and East Priangan, especially dominant sectors in Baubau and Tasikmalaya Cities, which were building, services, electricity and clean water, trade, hotel and restaurant, transportation and communication and finance, rent and services and non-dominant sectors such as agriculture, mining and digging and manufacture industries. On the other hand, the dominant sectors in hinterland, regency/city in Southeast Sulawesi Islands and East Priangan, were services and agricultural sectors. In some regencies/cities in Southeast Sulawesi and East Priangan showed slow development in sectors of transportation and communication, mining and digging, manufacture industries, and electricity, gas and clean water; whereas, other sectors, generally, were equally distributed in hinterland.

**4.3. Economic Interaction and Regional Attractiveness**

**4.3.1. Gravity Model Analysis**

Baubau City is determined as the Center of National Activities (Pusat Kegiatan Nasional/ PKN) in area of Southeast Sulawesi Islands and Tasikmalaya City is determined as the Center of Regional Activities (Pusat Kegiatan Wilayah/PKW) of East Priangan area and it is stated in National Layout Plan (Rencana Tata Ruang Nasional/RTRN). The purpose of this determination is to accelerate development and economic growth. In addition, as a buffer area, especially in each region, it is expected that those cities are able to give spread effect and drive economic activities of its hinterland. Gravity model analysis during observation period of 2009-2013 in Baubau and Tasikmalaya Cities and their hinterlands is shown in Table 3.
Table 3. Gravity Model Analysis of Regencies/Cities of Southeast Sulawesi Islands and East Priangan in 2009-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Regency/City</th>
<th>Gravity Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2013</td>
<td>Baubau City</td>
<td>291.60</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton Regency</td>
<td>9.13</td>
</tr>
<tr>
<td>2009-2013</td>
<td>North Buton Regency</td>
<td>113.48</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Wakatobi Regency</td>
<td>9.25</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Muna Regency</td>
<td>113.48</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Bombana Regency</td>
<td>3.97</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Pangandaran Regency</td>
<td>174.6</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Tasikmalaya City</td>
<td>49.64</td>
</tr>
<tr>
<td>2009-2013</td>
<td>North Pangandaran Regency</td>
<td>42.00</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Garut Regency</td>
<td>1.30</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Ciamis Regency</td>
<td>3.88</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Banjar City</td>
<td>6.27</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton and Muna Regencies</td>
<td>1.00</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton and Muna Regencies</td>
<td>6.27</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton and Muna Regencies</td>
<td>1.00</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton and Muna Regencies</td>
<td>6.27</td>
</tr>
<tr>
<td>2009-2013</td>
<td>Buton and Muna Regencies</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Result of Gravity Analysis. Data was processed from BPS of Baubau City. Regencies: Buton, North Buton, Wakatobi, Muna and Bombana Regency (2009-2014) and BPS of Tasikmalaya City, Tasikmalaya Regency, Garut Regency, Ciamis Regency, Banjar City, Pangandaran Regency and West Java Province, 2009-2014

Table 3 and figure 9 below are the result of gravity model analysis of regencies/cities in Southeast Sulawesi Islands and East Priangan. Figure 10 shows gravity model of regencies/cities of Southeast Sulawesi Islands in 2009-2013. Strong economic interaction and regional attractiveness were indicated between Baubau City and Buton Regency with average gravity value of 291.6 gravity unit. A fairly strong economic interaction and regional attractiveness occurred between Buton City and Muna Regency with average gravity value of 113.48 gravity unit. The higher value of gravity index shows the closeness of a relationship and strong influence between Baubau City and Buton and Muna Regencies. Regarding North Buton Regency, the economic interaction and regional attractiveness of Baubau City was 78.08 gravity unit. This value was bigger than that of Wakatobi Regency of 9.25 and Bombana Regency of 3.97. Small value of gravity means that the interaction and regional attractiveness of Baubau City toward its three hinterland regencies was weak based on the gravity index.


Figure 9. Gravity Model of Regencies/Cities of Southeast Sulawesi Islands and East Priangan.
weak. On the other hand, Banjar City as an alternative city of Tasikmalaya City in East Priangan had less strong economic interaction and regional attractiveness with its hinterlands based on the result of gravity analysis among regencies/cities in East Priangan region.

Along with the advancement and economic development, Baubau and Tasikmalaya Cities has developed into a center of growth in Southeast Sulawesi Islands and East Priangan regions. It is supported by the availability of various facilities, infrastructures and services that became the attractiveness for its hinterland. Those facilities and services are education, health, entertainment and recreation, and trade. In addition, there is also a development in manufacture industries, the availability of airport, the development of financial institutions, transportation, opportunity for business and employment and bigger regional minimum wage than its hinterlands.

5. CONCLUSION

Based on research result and as set in the research purposes, following are the conclusions:

1. Research result shows that economic structure of Baubau and Tasikmalaya Cities was more advanced and developed. It can be seen from the result of Klassen Typology Analysis of each regency/city in Southeast Sulawesi Province. The result shows that the position of Baubau, Wakatobi Regency dan North Buton Regency was within the classification of fast growing region, Muna Regency was within the classification of developed region but under pressure and Buton and Bombana Regency were within the classification of relatively underdeveloped regions. Whereas, the result for regencies/provinces in West Java Province shows that the position of Tasikmalaya City was within the classification of fast growing region compare to its hinterlands which were Tasikmalaya, Garut and Ciamis Regencies, Banjar City and Pangandaran Regency that belong to the classification of relatively underdeveloped region.

Result of Entropy Diversity Index (IDE) Analysis in Southeast Sulawesi Islands region shows that IDE of Baubau City (0.85) was bigger than the average entropy value of its hinterland, which were Buton Regency (0.80), North Buton (0.73), Wakatobi Regency (0.82), Muna Regency (0.81) and Bombana Regency (0.43). In East Priangan region, the result shows that the average entropy index of Tasikmalaya City (0.85) was bigger than the average entropy value of its hinterlands, which were Tasikmalaya Regency (0.71), Garut Regency (0.67), Ciamis Regency (0.81), Banjar City (0.83) and Pangandaran Regency (0.74). The higher value of entropy shows that regional economic of Baubau and Tasikmalaya Cities was more advanced and developed. Result of Location Quotient (LQ) Analysis shows that the average value of LQ of Baubau City (10,31) was bigger than the average LQ value of its hinterlands, which were Buton Regency (8,07), North Buton Regency (7,34), Wakatobi Regency (8,64), Muna Regency (7,82) and Bombana Regency (7,20). As well as the average LQ value of Tasikmalaya City (12,80) was bigger than the average LQ value of its hinterland; which were Tasikmalaya Regency (9,73), Garut Regency (9,25), Ciamis Regency (11,23), Banjar City (10,91) and Pangandaran Regency (10,20). The superior sectors that became the economic basis sector of Tasikmalaya City were building, trade, hotel and restaurant, transportation and communication, finance, rent and financial services and services.

2. Result of Gravity Model Analysis of Southeast Sulawesi Islands in 2009-2013 shows a very strong economic interaction and regional attractiveness between Baubau City and Buton Regency with average gravity value of 291,60 gravity unit. It followed with the economic interaction and regional attractiveness between Baubau City and Muna Regency with average gravity value of 113,48 gravity unit. Regarding North Buton, Wakatobi and Bombana Regencies, the economic interaction and regional attractiveness of Baubau City was very weak shown by small gravity value. Result of gravity model analysis of East Priangan in 2009-2013 shows a strong increase in the economic interaction and regional attractiveness between Tasikmalaya City and Tasikmalaya Regency of 174,60 gravity unit and Ciamis Regency of 101,2 gravity unit. However, regarding Garut Regency, Banjar City and Pangandaran Regency, the economic interaction and regional attractiveness of Tasikmalaya City was very weak shown by small gravity index.

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