Determination Of The Same Leading Sectors In Blitar City

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Abstract

The purpose of this study was to determine the same leading sector based on the Klassen Typology method, Location Quotient, Shift-Share, Growth Ratio Models and Overlay. This study was based on the fact that most of previous studies only determined the leading sectors based on one method only and none of them determined which sectors categorized similar. Therefore, it is important to determine superior sectors from several methods and which sectors must be prioritized in the development. The data of this study were derived from the average GRDP of Blitar City on the basis of constant prices in 2010 according to business fields from 2011-2017. The results of this study conclude that the same leading sectors based on these 5 methods in Blitar City are 1) Large and Retail Trade; Car and Motorcycle Repair, 2) Information and Communication, and 3) Financial and Insurance Services. Therefore, the Blitar City government must continue to develop these sectors by increasing investment and ease of licensing so that the sectors can continue to increase its contribution to the economy of Blitar City.

Key words: Leading Sector, Blitar City, GRDP

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INTRODUCTION

Regional development as an integral part of national development is carried out based on the principle of regional autonomy and the regulation of national resources which provide opportunities for increasing democracy and regional performance to improve the welfare of society. Therefore, regional economic development is a part of overall regional development.

In an effort to achieve regional economic development goals, the main policy that needs to be applied is to realize every effort so that regional development priorities are in accordance with the development potential of the region. It is because the potentials development of each region has is varied, so each must determine the activities of the dominant economic sectors.

Regional economic development policies applied in an area must be adjusted to the conditions (problems, needs, and potential) of the area concerned. Therefore, in-depth study on the condition of each region must be carried out to obtain data and information that are useful for determining the relevant regional development planning (Arsyad, 1999). Good economic development planning requires careful planning in using public and private resources as well as sectors that play roles in the planning process. Through the planned regional economic development planning, taxpayers, and investment as well as the creation of a climate of good economic activity, the development of an area can be said as a unitary unit that has a relationship between one another.

In this regard, regional governments in economic development and the implementation of regional autonomy refer to Law No. 22 of 1999 and Law No. 25 of 1999 which were then replaced by new Law No. 32 of 2004 concerning Regional Government and Law No. 33 of 2004 concerning Financial Balance between the Central Government and Regional Governments. Autonomous regions have the authority to regulate and serve the interests of the community based on community aspirations and to plan development in accordance with statutory regulations. Thus, the regions need to have the main concepts in regional development planning that contain the basic philosophy, vision, mission, policy direction, and development strategies as guidelines for governance and development management in the region. Therefore, it is realized that the implementation of regional development is not the responsibility of the government as a whole but is the responsibility of all parties and communities in the region so that the results obtained can be beneficial for all.

Planning is a continuous process that includes decisions or choices of various alternative uses of resources to achieve certain goals in the future. The purpose of planning according to Hatta is to organize a regulated national economy, plan for its purposes and courses. Meanwhile, according to Widjojo Nitisastro, planning is basically related to two things: first is the determination of choices to be achieved within a certain period of time based on the value of the community concerned. Second, choices between efficient alternative ways to achieve certain goals. In this case, for the determination of objectives that cover a certain period of time, and for the selection of these methods, certain criteria must be chosen first. Economic planning consists of a series of functions of community authority in optimally using economic resources to achieve a better order. Hence, economic planning is the regulation and direction of an economic activity through systematic coordinated actions by the central planning agency with specific objectives within a certain time period.

Regional economic development planning is not the planning of a region. It can be considered as a plan to improve the capacity of the private sectors in creating the value of private resources responsibly (Kuncoro, 2004).

From an economic point of view, the need for economic development planning is for having more efficient and effective allocation of development resources so that waste can be avoided, economic development or economic growth is stable and sustainable, and the economic stability in facing globalization can be achieved.

The most important thing that needs attention in development planning is how to determine the leading sectors of the region so
that the region has direction and guidance in improving development performance. Leading sector is very important in the economic development of a region. It does not only refer to the geographical location, but also to a sector that spreads over various economic channels, so the sector would be able to drive the economy as a whole. Again, leading sector is a sector that is able to encourage growth or development for other sectors, both sectors that supply inputs and sectors that use their output as input in the production process.

The role of the leading sector in the business of regional economic development and development is aimed at overcoming the limitations of funds and resources and increasing the efficiency of the utilization of available resources in order to carry out optimal urban development and development and in the context of optimization and efficiency of regional economic development as a foundation in development planning. Within the scope of development direction a priority is needed.

Determination of development priorities can be based on an opinion which concerns that the growth of an area will be optimized if development activities can be concentrated on economic sector activities that can utilize the strengths or strengths naturally owned by the region concerned. The determination of development priorities is needed because of the limitations in terms of time, funding, manpower, and available resources.

One way to find out the growth and development of an area can be done by conducting a study and analysis of existing economic activities or leading economic sectors. The results of the study further can determine the performance capabilities, growth and development of each economic sector. The ability to grow and develop in one economic sector will be a supporting and determining factor or a trigger for the growth of other sectors. One of the most important factors in regional development is regional economic growth done by developing existing leading sectors.

According to Tambunan (2001) leading sector refers to the value of comparison between sectors whether local, national or international. A sector is said to be leading at the international level if it shows higher added value compared to the same sector in another country. At the national level it is called the superior sector if a sector in a region has higher competitiveness compared to the same sector in other regions. According to Armstrong (2001) leading sector is a sector that is able to compete with the same sector in other regions. When the sector is able to compete with other regions, it will prove its ability to export. On the other hand Adisasmita (2005) states that sectors that have competitive and comparative advantages will be the leading sectors. It is because the sectors that have comparative and competitive advantages will have great value benefits with the same sector products. Meanwhile, according to McCann (2013) the characteristics of a sector are said to be superior if the sector has large production capacity, high added value, the magnitude of the multiplier effect and its products can be exported both to other regions and to other countries.

A superior sector will have the opportunity to be able to develop into a more advanced sector compared to several other sectors in certain regions due to the support of adequate technology, large capital and faster absorption of labor. By empowering the potential of superior sectors, the area will be able to bring in large investment opportunities so that it can give birth to a faster multiplier effect (Capello, 2007).

Determination of the leading sectors of a region is one thing that needs to be recognized by local governments in order to map which sectors to prioritize in the development (Sjafrizal, 2012). The determination of this superior sector also provides information on sectors that are slow in the development as a step for applying possible policies to optimize.

Leading sector is certain to have greater potential to grow faster than other sectors in an area, especially the supporting factors towards the superior sector, namely capital accumulation, growth of absorbed workforce, and technological progress. The creation of investment opportunities can also be done by empowering the potential of leading sectors.
own growth rate, and the pattern (structure) of the economy in one year of a certain period in a particular country or region. There are two ways to present GRDP, namely GRDP at Constant Price, meaning that all income aggregates are valued on a fixed price basis, so that aggregate income development from year to year is due to the development of real production not because of price increase or inflation. In other words, the GRDP at constant price is the sum of the value of production or income or expenditure which is valued on the basis of a fixed price (prices in the base year) used for one year. On the other hand, GRDP at Current Price is the total value of production or income (expenditure) that is valued according to the prices in effect in the year concerned. GRDP calculation based on constant prices is useful to describe the level of economic growth in a region both in the aggregate (overall) and sector. It is also useful to see changes in the economic structure of a region based on the distribution of each economic sector to the total value of GRDP.

Table 1. The Average GRDP Distribution of Each Province in Indonesia against Total GRDP based on 2010 Constant Prices from 2011-2017

| No | Provinces         | Distributions (%) | No | Provinces         | Distributions (%) |
|----|-------------------|-------------------|----|-------------------|-------------------|
| 1  | Jakarta           | 15.96             | 18 | West Kalimantan   | 1.24              |
| 2  | East Jawa         | 14.62             | 19 | South Kalimantan  | 1.23              |
| 3  | West Jawa         | 13.32             | 20 | West Nusa Tenggara| 0.93              |
| 4  | Central Jawa      | 8.93              | 21 | Yogyakarta        | 0.93              |
| 5  | East Kalimantan   | 5.27              | 22 | Central Sulawesi  | 0.86              |
| 6  | Riau              | 5.18              | 23 | Central Kalimantan| 0.86              |
| 7  | North Sumatra     | 4.86              | 24 | South Sulawesi    | 0.78              |
| 8  | Banten            | 4.04              | 25 | North Sulawesi    | 0.77              |
| 9  | South Sumatra     | 2.82              | 26 | East Nusa Tenggara| 0.63              |
| 10 | South Sulawesi    | 2.70              | 27 | North Kalimantan  | 0.59              |
| 11 | Lampung           | 2.20              | 28 | West Papua        | 0.58              |
| 12 | Riau Islands      | 1.67              | 29 | Bangka Belitung Islands | 0.51 |
| 13 | West Sumatra      | 1.54              | 30 | Bengkulu          | 0.42              |
| 14 | Papua             | 1.46              | 31 | West Sulawesi     | 0.28              |
| 15 | Bali              | 1.41              | 32 | Maluku            | 0.27              |
| 16 | Jambi             | 1.36              | 33 | Gorontalo         | 0.24              |
| 17 | Aceh              | 1.32              | 34 | North Maluku      | 0.22              |

Source: Central Bureau of Statistics
Per capita income derived from a comparison of GRDP based on current prices and the number of residents in the year concerned can be used to compare the level of prosperity of one region with other regions. The comparison of GRDP on the basis of prices applied to GRDP on the basis of constant prices can also be used to see inflation or deflation.

East Java Province is one of the provinces in Indonesia that continues to improve its development performance from year to year. This province is the second largest economy-power province in Indonesia in terms of Gross Regional Domestic Product (PDRB) value after DKI Jakarta Province (BPS, 2018). According to data from the Central Statistics Agency (2018) in Table 1, from 2011-2017 the average value of East Java’s GRDP based on the 2010 constant prices reached 1,230,509.29 billion rupiah or the distribution of East Java’s GRDP to Indonesia’s GRDP of 14.62 %, while the average value of Jakarta’s GRDP reached 1,343,231.39 billion rupiah or the reached 15.96 % GRDP distribution. This shows that East Java Province is one of Indonesia’s economic strengths.

If we look at the economic strength of East Java Province per district / city from the average regional GRDP distribution based on the constant 2010 prices of East Java GRDP from 2011-2017 (Table 2), it can be seen that Surabaya City is the region with the highest economic contribution to East Java GRDP, namely 24.61 %. The average value of Surabaya City GRDP from 2011-2017 reached 296,170,5 billion rupiah. In contrast, Blitar City is the region with the lowest distribution of GRDP against East Java GRDP from 2011-2017 only reached 0.29 % or the average of Blitar City GRDP was only 35,590,698 billion rupiahs. This shows that Blitar City role in the economic strength of East Java is still small. In this way, it is necessary to map the Blitar City economy so that potential sectors can be developed in the future. This is done so that the economy of Blitar City can improve its roles in the economic strength of East Java.

There are several methods carried out by previous researchers in determining the leading sectors of a region. Some of the methods often used by previous study were Klassen typology, location quotient (LQ), shift-share, growth ratio model (GRM) and overlay (Basuki, 2009; Guimarães, 2009; Amalia, 2012; Billings, 2012; Tristanto, 2013; Putra, 2013; Tian, 2013; Wahyuningtyas, 2013; Faisal, 2015; Hajeri, 2015; Sapriadi, 2015; Syahputra; 2015; Mangilaleng, 2015; Hariyanti, 2016; Bagaskara, 2017; Munandar, 2017; Kharisma, 2018). However, these researchers only determined the leading sectors of an area using one method only. For example, Basuki (2009) found that based on the Klassen Typology, the leading sector in Ogan Komering Ilir District is the sector of 1) Agriculture. Based on the LQ method, the leading sectors are 1) Agriculture Sector, 2) Building Sector, 3) Trade, Hotel and Restaurant Sector, and 4) Services Sector. Besides, based on the Shift-Share method the leading sectors are 1) Agriculture Sector, 2) Trade, Restaurant and Hotel Sector, and 3) Services Sector.

According to the GRM, the leading sectors of the region are 1) Agriculture and 2) Processing Industry, while according to the Overlay method the leading sectors are Agriculture and Processing Industry. The same thing was done by Wahyuningtyas (2013) who found superior sectors in Kendal Regency according to the Klassen Typology, namely 1) Agriculture and 2) Mining and Excavation, according to the LQ method are 1) Agriculture Sector, 2) Mining and Excavation Sector, 3) Sector Processing Industry and 4) Electricity, Gas and Water Supply Sector, according to the GRM method are 1) Mining and Excavation Sector, and 2) Transport and Communication Sector, while according to the Overlay method the leading sectors of the region are 1) Agricultural Sector and 2) Mining Sector and excavation.
Table 2. The Regency / City GRDP Distribution Average in East Java against Total GRDP in 2010
Constant Prices from 2011-2017

| No. | Regencies / Cities | Distributions (%) | No. | Regencies / Cities | Distributions (%) |
|-----|--------------------|-------------------|-----|--------------------|-------------------|
| 1   | Surabaya City      | 24.61             | 20  | Lumajang           | 1.39              |
| 2   | Sidoarjo           | 8.44              | 21  | Bangkalan          | 1.19              |
| 3   | Pasuruan           | 6.35              | 22  | Nganjuk            | 1.11              |
| 4   | Gresik             | 6.13              | 23  | Sampang            | 0.89              |
| 5   | Kediri City        | 5.46              | 24  | Ponorogo           | 0.87              |
| 6   | Bojonegoro         | 4.25              | 25  | Ngawi              | 0.84              |
| 7   | Malang             | 4.14              | 26  | Situbondo          | 0.83              |
| 8   | Mojokerto          | 3.52              | 27  | Bondowoso          | 0.83              |
| 9   | Banyuwangi         | 3.34              | 28  | Magetan            | 0.81              |
| 10  | Jember             | 3.30              | 29  | Madiun             | 0.80              |
| 11  | Malang City        | 3.16              | 30  | Trenggalek         | 0.78              |
| 12  | Tuban              | 2.77              | 31  | Pamekasan          | 0.70              |
| 13  | Kediri             | 1.78              | 32  | Batu City          | 0.70              |
| 14  | Jombang            | 1.72              | 33  | Pacitan            | 0.67              |
| 15  | Lamongan           | 1.68              | 34  | Madiun City        | 0.64              |
| 16  | Tulungagung        | 1.66              | 35  | Probolinggo City   | 0.50              |
| 17  | Blitar             | 1.56              | 36  | Pasuruan City      | 0.36              |
| 18  | Sumenep            | 1.55              | 37  | Mojokerto City     | 0.30              |
| 19  | Probolinggo        | 1.45              | 38  | Blitar City        | 0.29              |

Source: East Java Central Bureau of Statistics 2012-2018

However, none of these researchers confirmed which superior sector of each method having the same quality. This condition is considered important because the method has its own formula, so there will be advantages and disadvantages. To cover the gaps of each of these methods, it should be determined which superior sector of the 5 methods having the same quality. Thus, the same leading sectors are truly tested based on the 5 methods. If the same leading sectors have been found, these sectors will be prioritized for development, and not all leading sectors are found based on each method.

By referring to the above explanation, to determine the same leading sectors in Blitar City through 5 methods, this study tried to analyze the determination of the leading sectors similar to the case studies in the Blitar City area. This was done because Blitar City is the smallest economy city in East Java. Therefore, from the findings of this study, Blitar City government will have a reference which sectors should be prioritized in development so that Blitar City can become a new economic power in East Java Province.

METHOD

This study used secondary data from Blitar City's Gross Regional Domestic Product (GRDP) from 2011-2017. Data analysis techniques in determining leading sectors were realized by the use of Klassen, LQ, Shift-Share, GRM and Overlay typology approaches.

Klassen Typology Analysis is an approach that can be used to examine how the structure and pattern of output of each economic formation sector in an area will be. The structure and pattern of each of these outputs will be useful as an illustration of the future economic prospects of the region. In addition, knowledge of the structure and pattern of each of these outputs can be used as material in determining regional policies to advance development.
The Klassen Typology approach is calculated based on growth (Si) and the contribution of each sector forming the GRDP City of Blitar according to the business field. Classification of the GRDP sector according to the Klassen Typology as listed in Table 3.

Table 3. The Classification of Leading Sectors according to the Klassen Typology

| Quadrant I                  | Quadrant II                  |
|-----------------------------|-------------------------------|
| (Developed Sector)          | (Stagnant Sector)             |
| s_i > s and sk_i > k       | s_i < s and sk_i > sk        |
| Quadrant III                | Quadrant IV                   |
| Potential Sector            | Under developed Sector        |
| s_i > s and sk_i < sk       | s_i < s and sk_i < sk        |

Source: Sjafrizal (2018)

Notes:

s_i = growth of sector i (certain) in GRDP in Blitar City
s = average growth of all sectors in GRDP in Blitar City
ski = contribution of sector i (certain) to GRDP in Blitar City
sk = average contribution of all sectors to GRDP in Blitar City

LQ analysis is useful to see which sectors are superior or base compared to the same sector in the higher regions. This analysis can also be useful to assess how much regional concentration in an economic activity compared to the same economic activity at regional and national levels. Determination of the superior sector or base is done by analyzing GRDP data of each sector in a region and the GRDP of each sector in the area above.

If the role of a sector is higher than the same sector in a higher area, the LQ value of the sector will be small than one. This means that the sector cannot export part of its added value or is only able to meet its own regional needs and even tends to bring in imports from other regions.

LQ analysis is also used to determine the base sector in a particular area. The LQ approach to study was calculated by the formula:

\[ LQ = \frac{x_i}{x_i} \]

Where:

xi : Value of GRDP sector i in Blitar City
Xi : Value of GRDP sector i in East Java Province

Based on the formula above, there are three possible LQ values that can be obtained, namely:

If the value of LQ = 1, it means that the role of sector i in Blitar City is the same as the role of sector i in East Java Province. If the value of LQ > 1, it means that the role of sector i in Blitar City is greater than the role of sector i in East Java Province. This sector is called a superior sector or base. Oppositely, if the value of LQ < 1, it means that the sector i in Blitar City has a smaller role compared to sector i in East Java Province. This sector is called the non-superior or non-base sector.

Shift Share Analysis is an analysis that aims to determine the work performance or productivity of the regional economy by comparing it with a larger area (regional or national). This analysis is also used to analyze the economic growth of a region from three main elements, namely Regional Share, Proportionality Shift and Shift Differential. Regional Share elements show influence from outside (both national and other regions) on
regional economic growth, while the Proportionality Shift element represents the sectoral potential of the region and Shift Differential indicates the potential for regional specialization (Sjafrizal, 2018).

GRDP is one of the economic indicators that shows an effort to observe changes in regional or regional economic structure. The impact of changes in GRDP is considered by subsectors including the fast or slow national growth rate. Therefore, with the aim of observing economic growth and the development of economic shifts, shift-share can be used.

The formula used for shift-share analysis were:
\[ D_{ij} = N_{ij} + M_{ij} + C_{ij} \]  
\[ N_{ij} = E_{ij} \cdot r_{n} \]  
\[ M_{ij} = E_{ij} \cdot (r_{in} - r_{n}) \]  
\[ C_{ij} = E_{ij} \cdot (r_{ij} - r_{in}) \]

Notes:
- \( i \) = Economic sectors studied,
- \( j \) = Variable area studied (City of Blitar),
- \( D_{ij} \) = change in sector \( i \) in area \( j \) (City of Blitar),
- \( N_{ij} \) = growth of sector \( i \) in area \( j \) (City of Blitar),
- \( M_{ij} \) = industrial mix sector \( i \) in area \( j \) (City of Blitar),
- \( C_{ij} \) = sector \( i \) competitive advantage in area \( j \) (City of Blitar),
- \( E_{ij} \) = GRDP sector \( i \) in area \( j \) (City of Blitar),
- \( r_{ij} \) = growth rate of sector \( i \) in area \( j \) (City of Blitar),
- \( r_{n} \) = growth rate of GRDP in area \( n \) (East Java Province),
- \( r_{in} \) = growth rate of sector \( i \) in area \( n \) (East Java Province)

Each growth rate was defined as follows:

1. Measuring the growth rate of the sector \( i \) in the region \( j \)
\[ r_{ij} = \left( \frac{e^{*ij} - e_{ij}}{e_{ij}} \right) \]

2. Measuring the growth rate of the national economy \( i \) sector
\[ r_{in} = \left( \frac{e^{*in} - e_{in}}{e_{in}} \right) \]

3. Measuring the national growth rate
\[ r_{n} = \left( \frac{e^{*n} - e_{n}}{e_{n}} \right) \]

Notes:
- \( e^{*in} \) = Sector \( i \) GRDP at the national level in the last year of analysis,
- \( e_{in} \) = Sector \( i \) GRDP at the national level on a certain base year,
- \( e^{*ij} \) = Sector \( i \) GRDP in \( j \) region in the last year of analysis,
- \( e_{ij} \) = Sector \( i \) GRDP in \( j \) region on a certain base year,
- \( e^{*n} \) = National GRDP in the last year of analysis,
- \( e_{n} \) = National GRDP on a certain base year

A sector is said to be a superior sector by this method if the \( D_{ij} \) value of the sector is the highest. If sector \( i \) has the highest \( D_{ij} \) value then the sector is the leading sector in that area.

GRM analysis is used to view regional economic activities that modify the original form of shift-share analysis. This analysis is done by reducing the initial equation of the shift-share component, namely Differential Shift and Proportionality Shift. By doing this, the GRM analysis will be able to show a comparison of the growth of a sector with the growth of the same sector at the district / city level with the provincial level. Thus, the GRM analysis is divided into 2, namely: (1) reference area growth ratio (RPR) and (2) study area growth ratio (RPS).

(i) Reference Area Growth Ratio (RPR).
The RPR in this study was a comparison between the income growth rate of activity \( i \) in the reference area (East Java) and the total growth rate of activity (GRDP) of the reference area.

\[ RPR = \frac{\Delta E_{EB}/E_{EB}(t)}{\Delta E_{R}/E_{R}(t)} \]
Notes;
IEiR is the change in income of activity i in the East Java region,
EiR (t) is the activity income at the beginning of the study period in East Java, ΔER is a change in GDP in East Java;
ER (t) is GRDP at the beginning of the study in East Java.

If the RPR value is > 1 or positive (+), it means that the growth of a sector i in East Java is higher than the total GRDP growth in East Java. If the RPR value is < 1 or negative (-), it means that the growth of a sector i in East Java is smaller than the total GRDP growth in East Java.

(2) Study Area Growth Ratio (RPS). The RPS in this study was a comparison between the rate of growth of the activity in the study area (Blitar City) and the growth rate of activity i in the reference area (East Java).

\[ R_{PS} = \frac{\Delta E_{ij}/E_{ij}(t)}{\Delta E_{iR}/E_{iR}(t)} \]  

(10)

Notes;
ΔEij is the change in income of activity i in Blitar City,
Eij (t) is activity income i at the beginning of the study period in Blitar City,
ΔEiR is change in activity income i in East Java,
EiR (t) is activity income i beginning of study period in East Java.

If the value of RPs is > 1 or positive (+), it means that the growth of sector i in Blitar City is higher than the growth of sector i in East Java. If the value of RPs is < 1 or negative (-), it means that the growth of a sector i in Blitar City is lower than the growth of sector i in East Java.

The results of this GRM analysis were classified as follows: Classification 1, namely the value of RPR (+) and RPS (+) indicates that the sector at both the provincial and district/city levels has the dominant growth. This activity is then called dominant growth. Classification 2, namely the value of RPR (+) and RPS (-) indicates that the sector at the provincial level shows dominant growth, but not at the district/city level. Classification 3, namely the value of RPR (-) and RPS (+) indicates that the sector at the provincial level shows non-dominant growth while at the district/city level it is the dominant one. Classification 4, namely the value of RPR (-) and RPS (-) indicates that the sector both at the provincial level and at the district/city level has non-dominant growth.

Overlay analysis aims to provide an assessment of the sectors forming the regional economy by determining the growth and contribution of each sector. This analysis combines the use of the LQ method and the GRM method. However, the GRM method used is only a component of the Study Area Growth Ratio (RPs). From the analysis of this method, the economic sectors which have a positive value (+) and negative value (-) can be seen. If a sector has a positive LQ and positive RPs, the sector can be said to be a leading sector. However, if there is one negative LQ or RPs value, then the sector is not a superior sector. Positive LQ and RPs results indicate the value of each component is greater than one, while the negative value indicates a value that is less than one.

Overlay analysis is also intended to determine potential economic sectors or activities based on growth criteria and contribution criteria by combining results from Location Quotient (LQ) and the Conclusion Ratio Method (GRM). This method has 4 (four) assessments or possibilities, namely 1) If the contribution and growth of a sector are positive (+) then this sector can be said to be a very dominant sector both from contribution and from growth. 2) If the contribution of a sector...
is positive (+) but negative growth (-) then this sector can be said to be a sector whose contribution is dominant but its growth is small. 3) If a sector contributes negatively (-) but positive growth (+) then this sector can be said to be an activity sector whose contribution is small but its growth is dominant. 4) Whereas if a contribution sector is negative (-) and growth (-) this shows that the sector is a sector that is not potential.

RESULTS AND DISCUSSION

As explained in the previous chapter, this study attempted to determine the same leading sector based on the Typology of Klassen, LQ, Shift-Share, GRM and Overlay methods. This was done because there found no previous studies investigating the same leading sector based on the 5 methods. The studies only determined leading sectors based on each method. Consequently, the results were not the same between one method and another. Therefore, this study tried to determine the same leading sector based on the 5 methods.

Leading sectors that have been determined from the 5 methods were those that have actually been tested based on the 5 methods, so it was scientific.

Table 4. The Classification of Development Sectors in Blitar City based on the Klassen Typology Approach from 2011-2017

| Growth | Above Average Growth | Below Average Growth |
|--------|----------------------|----------------------|
|        |                      |                      |
|        |                      |                      |

| Contribution | Above Average Contributions | Below Average Contributions |
|--------------|-------------------------------|-----------------------------|
|              | 1. Processing Industry        | 1. Government Administration, Defense and Compulsory Social Security |
|              | 2. Construction of Transportation and Warehousing | |
|              | 3. Large and retail trade; Car and Motorcycle Repair | 1. Agriculture, Forestry and Fisheries |
|              | 4. Information and Communication | 2. Mining and quarrying |
|              | 5. Financial and Insurance Services | 3. Procurement of Electricity and Gas |
|              | 6. Educational Services | 4. Procurement of Water, Waste, Waste and Recycling Management |
|              | 1. Transportation and Warehousing | 5. Company services |
|              | 2. Provision of Accommodation and Eating Drinks | 6. Other services |
|              | 3. Real Estate | |
|              | 4. Health Services and Social Activities | |

Source: Central Bureau of Statistics of Blitar City (Processing Results)
Table 4 shows the calculation results of the determination of leading sectors based on the Klassen Typology approach. These results were obtained by averaging the growth and contribution of each sector to the Blitar City GRDP from 2011-2017. From the results of these calculations it was found that there were 6 sectors in Quadrant I or categorized as Advanced. The advanced category is indicated by its growth and contribution that is above the average. Those covered 1) Manufacturing Industry, 2) Construction of Transportation and Warehousing, 3) Wholesale and Retail Trade; Car and Motorcycle Repair, 4) Information and Communication, 5) Financial and Insurance Services and 6) Educational Services.

There was one sector that belonged to Quadrant II or Developing. It was said so because the growth of this sector was below average, while the contribution of this sector to the Blitar City’s GRDP was above average. These sectors were 1) Mandatory Government Administration, Defense and Social Security sectors.

There were 4 sectors in Quadrant III or Potential categorized sectors. These sectors were called potential because their growth was above average, but their contribution was below average. These sectors were 1) Transportation and Warehousing, 2) Provision of Accommodation and Food and Beverage, 3) Real Estate, and 4) Health Services and Social Activities.

There were 6 sectors categorized into Quadrant IV or Disadvantaged. The sectors in this category was considered as lagging behind because they had below average growth and categories. They were 1) Agriculture, Forestry, and Fisheries, 2) Mining and Quarrying, 3) Electricity and Gas Procurement, 4) Water Supply, Waste Management, Waste and Recycling, 5) Company Services and 6) Other services.

Furthermore, based on the results of the Klassen Typology calculation there were 6 sectors categorized into Quadrant I or Advanced category. Those 6 sectors could be called as leading sectors in the City of Blitar, and covered secondary and tertiary sectors. The secondary and tertiary sectors in Blitar were run due to the relatively small area of Blitar City which made it difficult to have potential agricultural land. The area of Blitar City is only 33 Km2. Then, in the side of Blitar City lies the trade route between regions in East Java so that the trade and service sector can still revive. These are the reasons why the secondary and tertiary sectors are far developing in Blitar City compared to the primary sector. Therefore, these sectors must be prioritized by Blitar City regional government in formulating development plans to be more targeted.

The results of previous studies (Basuki, 2009; Amalia, 2012; Tristanto, 2013; Hajeri, 2015; Mangilaleng, 2015; Hariyanti, 2016; Bagaskara, 2017; Kharisma, 2018) found several sectors which include in Quadrants I, II, III and IV based on the Klassen Typology method. As Basuki’s study (2009) found, there are 1 sector in Quadrant I and II, there are 3 sectors in Quadrant III and there are 4 sectors in Quadrant IV. In his study Basuki only saw 9 sectors in the economy of Ogan Komering Ilir Regency. The same thing was done by Hajeri (2015) in determining the leading sectors in Kubu Raya Regency. Based on Klassen Typology Hajeri found that there are 3 sectors that are in Quadrant I, 5 sectors in Quadrant II, and 1 sector in Quadrant IV.

Klassen typology is indeed widely used by previous researchers in determining the leading sector in an area. However, this method contains weaknesses since it only looks at
determining leading sectors based on growth and contribution criteria. Therefore it is necessary to combine other methods in determining the same superior sector in an area.

The second method used to see the leading sector in Blitar City in this study was LQ. Based on the calculation of the LQ coefficients of each development sector in Blitar City, there were 11 sectors categorized as the base sector and 6 sectors categorized as non-base (Table 5). These 11 sectors categorized as base sectors because they had an average LQ value from 2011-2017 greater than 1. They were 1) Procurement of Electricity and Gas, 2) Construction of Transportation and Warehousing, 3) Wholesale and Retail Trade; Car and Motorcycle Repair, 4) Information and Communication, 5) Financial and Insurance Services, 6) Real Estate, 7) Company Services, 8) Government Administration, Mandatory Social Security and Protection, 9) Educational Services, 10) Health Services and Social Activities and 11) Other services. Meanwhile, there were 6 non-base sectors whose average value of LQ from 2011-2017 smaller than 1. These sectors were 1) Agriculture, Forestry, and Fisheries, 2) Mining and Quarrying, 3) Processing Industry, 4) Electricity and Gas Procurement, 5) Construction of Transportation and Warehousing, and 6) Provision of Accommodation and Food and Beverage.

| No | Sectors                                                                 | LQ Average | Criteria     |
|----|-------------------------------------------------------------------------|------------|--------------|
| 1  | Agriculture, Forestry and Fisheries                                     | 0.24       | Non Base     |
| 2  | Mining and excavation                                                   | 0.00       | Non Base     |
| 3  | Processing industry                                                     | 0.30       | Non Base     |
| 4  | Procurement of Electricity and Gas                                      | 0.21       | Non Base     |
| 5  | Water Supply, Waste, Waste and Recycling Management                     | 1.70       | Base         |
| 6  | Construction of Transportation and Warehousing                          | 0.74       | Non Base     |
| 7  | Large and Retail Trade; Car and Motorcycle Repair                       | 1.23       | Base         |
| 8  | Transportation and Warehousing                                          | 1.29       | Base         |
| 9  | Provision of Accommodation and Eating Drinks                            | 0.89       | Non Base     |
| 10 | Information and Communication                                           | 2.14       | Base         |
| 11 | Financial and Insurance Services                                        | 3.76       | Base         |
| 12 | Real estate                                                             | 2.18       | Base         |
| 13 | Company Services                                                        | 1.02       | Base         |
| 14 | Government Administration, Defense and Compulsory Social Security       | 2.80       | Base         |
| 15 | Education Services                                                      | 2.35       | Base         |
| 16 | Health Services and Social Activities                                   | 2.82       | Base         |
| 17 | Other services                                                          | 3.43       | Base         |

Source: Central Bureau of Statistics of Blitar City and East Java (Processing Results)

Based on the LQ method it was known that the number of base sectors was more than the non-base sector. This condition meant that the development sectors in Blitar City according to this method have been very good because there found many sectors whose existence had a significant role compared to the same sector at the provincial level. In details, the development sectors in Blitar City were dominated by secondary and tertiary sectors. This was seen from the data that the base sectors in Blitar City were mostly dominated by secondary and tertiary sectors. The dominance of the secondary and tertiary sectors in Blitar...
LQ method is the method most widely used by previous researchers in determining the leading sector in an area. It works by comparing the value of GRDP sector i in an area with the same sector in the region above the area. However, this method also contains weaknesses because it only compares the value of GRDP sector i in an area with the same sector in the regions above it. For this reason, it is necessary to determine the leading sectors with other methods and to confirm the results of the same leading sector.

The third method used to see the leading sector in Blitar City was Shift-Share. Based on the calculation of shift-share in Table 6, the development sectors in Blitar City showed that national economic growth has affected Blitar City's economic growth of 1,112.10 billion rupiahs or 40.08 percent (Nij). Meanwhile, the influence of the industrial mix (Mij) affected the economic growth of Blitar City by 1,112.10 billion rupiahs or around 40.08%. The value of competitive advantage (Cij) in Blitar City was 550.18 billion rupiahs or 19.83 percent. Next, the small value of Blitar City's competitive advantage indicated the small contribution of Blitar City special potentials to the economic growth.

When observed thoroughly, there were 16 sectors with a positive Dij value and only 1 sector with a negative Dij value. The sector with the lowest or negative Dij value was the Mining and Excavation sector with a value of -0.02. This condition was due to the low Cij value of the Mining and Quarrying sector equal to -0.15. In addition, the Nij and Mij values were also not too large, only 0.08 and 0.06, respectively. In other words the special potential of this sector was very low.
Table 6. The Shift-Share Values in Each Development Sector in Blitar City from 2011-2017

| No | Sectors                                                               | Nij     | Mij     | Cij     | Dij     |
|----|-----------------------------------------------------------------------|---------|---------|---------|---------|
| 1  | Agriculture, Forestry and Fisheries                                   | 32.32   | -13.67  | -13.25  | 5.40    |
| 2  | Mining and excavation                                                 | 0.08    | 0.06    | -0.15   | -0.02   |
| 3  | Processing industry                                                   | 98.34   | 95.11   | -7.64   | 185.81  |
| 4  | Procurement of Electricity and Gas                                    | 0.81    | 0.96    | 0.61    | 2.38    |
| 5  | Water Supply, Waste, Waste and Recycling Management                   | 1.86    | 1.26    | -1.38   | 1.74    |
| 6  | Construction of Transportation and Warehousing                         | 76.30   | 79.07   | -9.26   | 146.12  |
| 7  | Large and Retail Trade; Car and Motorcycle Repair                     | 257.19  | 299.77  | 23.51   | 580.47  |
| 8  | Transportation and Warehousing Provision of Accommodation and Eating Drinks | 42.50  | 53.34   | -7.23   | 88.61   |
| 9  | Information and Communication                                         | 52.33   | 67.75   | 6.22    | 126.30  |
| 10 | Financial and Insurance Services                                      | 132.96  | 215.15  | -47.37  | 300.74  |
| 11 | Real estate                                                           | 109.42  | 175.92  | -21.80  | 263.55  |
| 12 | Company Services                                                      | 42.53   | 50.81   | -5.03   | 88.31   |
| 13 | Government Administration, Defense and Compulsory Social Security     | 8.74    | 8.02    | -3.52   | 13.24   |
| 14 | Education Services                                                    | 71.78   | 30.54   | -3.84   | 98.48   |
| 15 | Health Services and Social Activities                                 | 69.90   | 82.17   | -10.06  | 142.02  |
| 16 | Other services                                                        | 20.62   | 37.08   | -7.94   | 49.75   |
| 17 | Total                                                                 | 55.62   | 37.51   | -10.68  | 82.45   |
|    | Persentase                                                            | 1,112.10| 1,112.10| 550.18  | 2,774.38|

Source: Central Bureau of Statistics of Blitar City and East Java (Processing Results)

The sectors with the highest Dij values were the Wholesale and Retail Trade sector; Car and Motorcycle Repair. The Dij value of this sector was 580.47. It was due to the high contribution of Mij value in this sector. The high contribution of Mij to the Wholesale and Retail Trade sector; Car and Motorcycle Reparation indicated that this sector was able to grow more than the growth of the same sector at the provincial level. Besides, the high value of the Dij sector of Wholesale and Retail Trade; Car and motorcycle repairs were also contributed by the high Nij value of this sector. The Nij value of this sector was 257.19, meaning that national economic growth affected sector growth by 257.19.

Then, the sectors with the second and third highest Dij values based on the Shift-Share calculation were the Information and Communication sector and the Financial Services and Insurance sector. Each of the Dij values of this sector was 300.74 and 263.55. The biggest contribution to the high Dij value of each of these sectors was the Mij value. Mij value of each of these sectors was 215.15 and 175.92. The high contribution of each of these sectors Mij proved that this sector was able to grow more than the growth of the same sector at the provincial level.

Based on the observation about the Dij value of each sector, it can be seen that the Wholesale and Retail Trade sector; Car and Motorcycle Repair, Information and Communication sector and Financial Services and Insurance sectors occupied the 3rd highest position from the calculation of shift-share analysis. This meant that this sector was the leading sector of the Blitar City economy. These
three sectors were classified as secondary and tertiary sectors. The high Dij value of each of these sectors was due to the economic agglomeration in Blitar City. As an urban area, Blitar City is a gathering place for high-value economic activities. It is because agglomeration is a gathering of industries or activities in one particular location that has many advantages. The gathering of these activities will increase investment because one activity with another economic activity can establish economic activities together. In an urban area, economic agglomeration is very likely to occur because economic activity in urban areas is higher than in rural areas. Therefore, the advanced and superior sectors in Blitar City were dominated by secondary and tertiary sectors not primary sectors.

From the results of previous studies it can be seen that the researchers (Basuki, 2009; Guimarães, 2009; Amalia, 2012; Billings, 2012; Tristanto, 2013; Faisal, 2015; Hajeri, 2015; Sapriadi, 2015; Syahputra; 2015; Mangilaleng, 2015; Hariyanti, 2016; Bagaskara, 2017; Munandar, 2017; Kharisma, 2018) determined the regional leading sectors based on the shift-share method. Amalia (2012) concluded that the sector which is a superior sector in the Bone Bolango Regency is the financial sector, leasing and business services because besides being a base sector, this sector has a positive shift value. Mangilaleng (2015) concluded that sectors that provide the greatest competitiveness in South Minahasa Regency are the agriculture sector, the industrial sector, and the construction sector. The agricultural sector based on shift share (SS) results has a competitive advantage because there is an absolute increase in the agricultural sector. This can be seen from the results of Shift Share where the economy of the agricultural sector is included in the seed and becomes a driver of regional economic performance. Nachnani (2017) also found that shift-share is one of the methods in determining leading sectors in India.

The shift-share method also has weaknesses in determining the leading sectors of the region because it only determines a sector in the regional economy based on a comparison with the same sector in the area above it. Therefore it is necessary to combine with other methods in determining the same regional superior sectors so that the weaknesses of each sector can be covered.

The fourth method used to determine the leading sector in this study was the Growth Ratio Model (GRM). The results of the GRM calculation are presented in Table 7. From the results of calculations using the GRM approach it can be seen that there were 8 sectors with positive RPs and RPs (+), and are potential sectors both at the provincial level and at the district / city level. It is because they had prominent growth values from other economic sectors. The sectors were 1) Wholesale and Retail Trade; Car and Motorcycle Repair, 2) Transportation and Warehousing, 3) Provision of Accommodation and Food and Beverage, 4) Information and Communication, 5) Financial and Insurance Services, 6) Real Estate, 7) Educational Services and 8) Health Services and Social Activities.
Table 7. The Results of GRM Development Sector Calculation of Blitar City from 2011-2017

| No | Sectors                                      | RPr Value | Criteria | RPs Value | Criteria |
|----|---------------------------------------------|-----------|----------|-----------|----------|
| 1  | Agriculture, Forestry and Fisheries         | 0.54      | -        | 0.17      | -        |
| 2  | Mining and excavation                       | 1.05      | +        | -1.11     | -        |
| 3  | Processing industry                         | 0.98      | -        | 0.97      | -        |
| 4  | Procurement of Electricity and Gas          | 0.08      | -        | 0.66      | -        |
| 5  | Water Supply, Waste, Waste and Recycling    | 0.76      | -        | 0.14      | -        |
| 6  | Construction of Transportation and Warehousing | 1.03  | +        | 0.95      | -        |
| 7  | Large and Retail Trade; Car and Motorcycle Repair | 1.11  | +        | 1.20      | +        |
| 8  | Transportation and Warehousing              | 1.20      | +        | 1.12      | +        |
| 9  | Provision of Accommodation and Eating Drinks| 1.31      | +        | 1.41      | +        |
| 10 | Information and Communication               | 1.44      | +        | 1.22      | +        |
| 11 | Financial and Insurance Services            | 1.36      | +        | 1.30      | +        |
| 12 | Real estate                                 | 1.08      | +        | 1.05      | +        |
| 13 | Company Services                            | 0.98      | -        | 0.69      | -        |
| 14 | Government Administration, Defense and Compulsory Social Security | 0.50 | - | 0.39 | - |
| 15 | Education Services                          | 1.10      | +        | 1.05      | +        |
| 16 | Health Services and Social Activities       | 1.46      | +        | 1.22      | +        |
| 17 | Other services                              | 0.76      | -        | 0.57      | -        |

Source: Central Bureau of Statistics Blitar City and East Java (Processing Results)

There were 2 sectors with positive RPr values (+) and negative RPs (-). This condition indicated that the growth of this sector at the provincial level was higher than the growth of the total provincial GRDP, but this sector had growth at a lower regional level compared to the growth of the same sector at the provincial level. In other words, these sectors had the potential at the provincial level but not at the district / city level. These sectors were 1) Mining and Quarrying, and 2) Construction of Transportation and Warehousing.

From the calculation of the GRM method, it can be interpreted that sectors that supported the development of Blitar City were secondary and tertiary sectors. This can be seen from the positive value of the RPr and RPs. Meanwhile, the primary sectors showed negative results. This condition was due to the condition of Blitar City as an urban area characterized by a high level of worker productivity that requires certain skills to be able to carry out daily activities. High competitiveness in the secondary and tertiary sectors also demanded the development of sectors that produced higher added value. It is in contrast to rural areas that do not have high productivity and competitiveness so that the economic activity is not too dense and busy like urban areas. Production activities in rural areas also cannot be expected to have high added value because the primary sector is not supported by high technology. Therefore, as an urban area, Blitar City is supported by economic sectors engaged in trade and services.

The results of this study are in line with previous studies (Basuki, 2009; Guimarães, 2009; Amalia, 2012; Billings, 2012; Putra, 2013; Tian, 2013; Wahyuningtyas, 2013; Faisal, 2015; Hajeri, 2015; Sapriadi, 2015; Hariyanti, 2016; Bagaskara, 2017; Munandar, 2017; Kharisma,
Their studies also used the GRM method to determine the leading sector in an area. Basuki (2009) found that the leading sectors in Ogan Komering Ilir Regency during the 2003-2007 period based on the GRM method are the agriculture and processing industries. This sector is said to be superior because it sector has a positive RPr and RPs value. However, there is one sector that is less potential, namely the mining and quarrying sector. Similar findings were also found by Wahyuningtyas (2013). Her study found that there are 2 sectors categorized as superior in Kendal Regency because the value of the RPr and RPs of the two sectors is positive. The sectors are mining & quarrying as well as communication & communication.

The GRM method also has weaknesses in determining the leading sector of a region. The weakness is because this method only compares the growth of activity in the study area with the activity growth in the reference region. To cover the weaknesses of this method it is necessary to determine the same leading sector based on the method of determining other leading sectors.

Table 8. The Results of Calculation of the Development Sector Overlay in Blitar City from 2011-2017

| No | Sectors                                      | LQ | RPs |
|----|---------------------------------------------|----|-----|
|    |                                             | Riil| Sign| Riil| Sign|
| 1  | Agriculture, Forestry and Fisheries         | 0.24| -    | 0.17| -    |
| 2  | Mining and excavation                       | 0.00| -    | -1.11| -    |
| 3  | Processing industry                         | 0.30| -    | 0.97| -    |
| 4  | Procurement of Electricity and Gas          | 0.21| -    | 0.66| -    |
| 5  | Water Supply, Waste, Waste and Recycling    | 1.70| +    | 0.14| -    |
| 6  | Construction of Transportation and          | 0.74| -    | 0.95| -    |
|    | Warehousing                                 |     |      |      |      |
| 7  | Large and Retail Trade; Car and Motorcycle  | 1.23| +    | 1.20| +    |
|    | Repair                                     |     |      |      |      |
| 8  | Transportation and Warehousing              | 1.29| +    | 1.12| +    |
| 9  | Provision of Accommodation and Eating       | 0.89| -    | 1.41| +    |
|    | Drinks                                     |     |      |      |      |
| 10 | Information and Communication               | 2.14| +    | 1.22| +    |
| 11 | Financial and Insurance Services            | 3.76| +    | 1.30| +    |
| 12 | Real estate                                 | 2.18| +    | 1.05| +    |
| 13 | Company Services                            | 1.02| +    | 0.69| -    |
| 14 | Government Administration, Defense and      | 2.80| +    | 0.39| -    |
|    | Compulsory Social Security                  |     |      |      |      |
| 15 | Education Services                          | 2.35| +    | 1.05| +    |
| 16 | Health Services and Social Activities       | 2.82| +    | 1.22| +    |
| 17 | Other services                              | 3.43| +    | 0.57| -    |

Source: Central Bureau of Statistics of Blitar City and East Java (Processing Results)

The fifth method used to determine the leading sector in this study was Overlay. From the results of the Overlay analysis in Table 8, there were 7 sectors with positive LQ (+) and positive RPs (+) values, meaning that there were 7 dominant sectors that contributed to the Blitar City GRDP. These sectors were 1) Wholesale and Retail Trade; Car and Motorcycle Repair, 2) Transportation and Warehousing, 3) Information and
Communication, 4) Financial Services and Insurance, 5) Real Estate, 6) Educational Services and 7) Health Services and Social Activities.

On the other hand, there were 5 sectors with negative LQ and RPs. This also meant that the sectors have contributed little to the Blitar City GRDP. The sectors were 1) Agriculture, Forestry, and Fisheries, 2) Mining and Quarrying, 3) Processing Industries, 4) Electricity and Gas Procurement, and 5) Construction of Transportation and Warehousing.

There were 4 sectors with positive LQ values and negative RPs. It indicated that the sector contribution was large, but the growth was small. The sectors were 1) Water Supply, Waste Management, Waste and Recycling, 2) Company Services, 3) Government Administration, Mandatory Defense and Social Security, and 4) Other services.

There was 1 sector with negative LQ values and positive RPs. This sector showed a potential sector because its contribution and growth to the GRDP was very low. The sector was 1) Provision of Accommodation and Food and Beverage.

Sectors which gain positive LQ values and positive RPs are the leading sectors based on this method. Therefore, these sectors must be prioritized by the Blitar City government for the future development. When viewed more closely the leading sectors of the City of Blitar based on this method were dominated by the secondary and tertiary sectors. This condition was due to the geographical structure of Blitar City which had no potential for the development of primary sectors. It is because the quality of the soil in Blitar City does not support the development of various plants and plants in the agricultural sector. Besides, based on its location, this area is surrounded by Blitar Regency whose agriculture sector is indeed more advanced compared to Blitar City. On the other hand, the city is much supported by facilities and infrastructure for the development of secondary and tertiary sectors, such as shops, offices, school buildings, hospitals, banking, housing, as well as trading activities and other services.

The results of this study are in line with previous studies (Basuki, 2009; Guimarães, 2009; Amalia, 2012; Billings, 2012; Putra, 2013; Tian, 2013; Wahyuningtyas, 2013; Faisal, 2015; Hariyanti, 2016; Bagaskara, 2017; Munandar, 2017 2017; Kharisma, 2018). The Overlay method is also used by these researchers to determine the leading sectors in their respective study areas. Putra (2013) found that the LQ and RPs sectors are mostly positive based on the Overlay method. It occurred in the electricity, gas and water supply sector, the construction sector, and the trade, hotel and restaurant sector. According to Putra, this is caused by the fact that the three sectors need each other. Alternatively, Kharisma (2018) concluded that there are 2 sectors with positive LQ and RPs values, namely wholesale and retail trade, car and motorcycle repair and government administration, defense, mandatory social security sectors. Those sectors show very dominant activities both from growth and from a very large contribution to the formation of GRDP and development in Maluku Province.

This method has enough advantages because it combines the LQ and GRM methods, although it still has weaknesses because it only looks at the comparison of sector i GRDP in a region with the regions above it. To determine the superior sector, it should be combined with previous methods in order to determine the same leading sector based on the five methods.
CONCLUSION

By referring to the results of the above calculation and analysis, the researchers draw several conclusions. Based on the Klassen Typology method, 6 leading sectors were found. These sectors are categorized as leading sectors because they are in Quadrant I or sectors categorized as advanced. Those who belonged to this category have growth and contribution to the Blitar City’s GRDP above the average. The sectors are 1) Manufacturing Industry, 2) Construction of Transportation and Warehousing, 3) Wholesale and Retail Trade; Car and Motorcycle Repair, 4) Information and Communication, 5) Financial and Insurance Services and 6) Educational Services.

According to the LQ method, 11 leading sectors were found. The decision of leading sectors based on the LQ method are indicated if the LQ value of each sector is greater than 1. Sectors with LQ values greater than 1 are also called the sector basis. The sectors are 1) Electricity and Gas Procurement, 2) Transportation and Warehousing Construction, 3) Wholesale and Retail Trade; Car and Motorcycle Repair, 4) Information and Communication, 5) Financial and Insurance Services, 6) Real Estate, 7) Company Services, 8) Government Administration, Mandatory Social Security and Protection, 9) Educational Services, 10) Health Services and Social Activities and 11) Other services.

Based on the GRM method, 8 leading sectors were found. In this method, a sector is said to be leading if the value of the RPr and RPs is positive (+) or is in Classification 1. Any sector with positive RPr and RPs (+) values or in Class 1 is considered as the a potential sector both at the provincial level and at the district / city level because it has a prominent growth value from other economic sectors. The sectors are 1) Wholesale and Retail Trade; Car and Motorcycle Repair, 2) Transportation and Warehousing, 3) Provision of Accommodation and Food and Beverage, 4) Information and Communication, 5) Financial and Insurance Services, 6) Real Estate, 7) Educational Services and 8) Health Services and Social Activities.

Based on the Overlay method, the researchers found 7 leading sectors. In this method, a sector is called leading if the sector has a positive LQ value (+) and positive RPs (+). In other words the sector dominantly contributes to the Blitar City GRDP. These sectors are 1) Wholesale and Retail Trade; Car and Motorcycle Repair, 2) Transportation and Warehousing, 3) Information and Communication, 4) Financial Services and Insurance, 5) Real Estate, 6) Educational Services and 7) Health Services and Social Activities.

Based on the 5 methods, there are 3 superior sectors resulted. These leading sectors are said to be the same because they appear in the Quadrant I in Klassen Typology, the base sector according to the LQ method, have the highest Dij value according to the Shift-Share calculation, have positive RPs and RPs according to the GRM method and have positive LQ values and Rp. Positive values based on the Overlay method. These sectors are 1) Wholesale and Retail Trade; Car and Motorcycle Repair, 2) Information and
Communication, and 3) Financial Services and Insurance.

If deeply examined, the leading sectors that push Blitar City development from 2011-2017 were dominated by the secondary and tertiary sectors. The dominant contribution of the secondary and tertiary sectors to the economy of Blitar City is because of the typical condition of Blitar City that is an urban area. Therefore, as an urban area, Blitar City is supported by economic sectors engaged in trade and services.

Based on these results it can be suggested to the Regional Government of Blitar City to prioritize the development of 3 sectors because these sectors serve a high contribution to the Blitar City’s GRDP. This policy can implemented by increasing investment and ease of business licensing in these sectors so that their roles and contribution to the Blitar City economy can continue to increase. Obviously, this situation also does not neglect development in other sectors.

REFERENCES
Adisasmita, H.R. 2005. Basics of Regional Economics. Jakarta : Graha Ilmu.
Amalia, Fitri. 2012. Determination of the Main Economic Sector in the Bone Bolango Regency Area with a PDRB Forming Sector Approach. Jurnal Etikonomi. Vol. 11. No. 2. 196-207.
Armstrong, H., & Taylor, J. 2000. Regional Economics and Policy. Oxford: Blackwell.
Arsyad, Lincolin. 1999. Introduction to Regional Economic Development Planning. Yogyakarta: BPFE.
Capello, R. 2007. Regional Economics. Abingdon: Routledge Amazon.
Central Bureau of Statistics. 2012-2018. Blitar City in Figures. Central Statistics Agency: City of Blitar.
Bagaskara, Afrisal Dea & Sudarti. 2017. Analysis of Potential Leading Sector and Shifting of Economic Structures in Regency/City of Banten Province in 2011-2015. Jurnal Ilmu Ekonomi. Vol. 1. No. 1. 75-92.
Basuki, Agus Tri & Utari Gayatri. 2009. Determinants of Leading Sector in Regional Development: Case Study in Ogan Komering Ilir Regency. Jurnal Ekonomi dan Studi Pembangunan. Vol. 10. No. 1. 34-50
Billings, Stephen B. 2012. The Location Quotient as an Estimator of Industrial Concentration. Regional Science and Urban Economics. Vol. 42. 642-647.
Faisal, et.al. 2015. Economic Growth Analysis of Six Divisions of Bangladesh Using Location Quotient and Shift-Share Method. Journal of Bangladesh Institute of Planners. Vol. 8. 135-144.
Guimarães, P., O. Figueiredo, and D. Woodward. 2009. Dartboard Tests for the Location Quotient. Regional Science and Urban Economics. Vol. 39. 360–364.
Hajeri, Erlinda Yusirisinthe & Eva Dolorosa. 2015. Analysis of the Determination of the Leading Economic Sector in Kubu Raya Regency. Jurnal Ekonomi Bisnis dan Kewirausahaan. Vol. 4. No. 2. 253-269.
Hariyanti, Dini & Utha, Maria. 2016. Analysis of Determinants Sectors Regional Development at 33 Provinces in Indonesia. OIDIA International Journal of Sustainable Development. Vol. 9. No. 3. 11-32.
Hidayat, Muhammad & Ranti Darwin. 2017. Leading Sector Analysis in Regional Development of the Meranti Islands Regency. Journal of Trend Media. Vol. 12. No. 2. 156-567
Kharisma, Bayu & Ferry Hadiyanto. 2018. Determination of Potential and Potential Sector Sectors in Maluku Province. Journal of Economics & Development Studies, Vol. 19. No. 1. 21-34.

Kuncoro, Mudrajad. 2004. Autonomy and Regional Development. Jakarta: Erlangga.

Mangilaleng, Ekaristi Jekna, Debby Rotinsulu, & Wensy Rompas. 2015. Leading Sector Analysis of South Minahasa Regency. Periodical Journal of Scientific Efficiency, Vol. 15. No. 4. 193-205.

Ma’ruf, Ahmad. 2003. Determination of Superior Sectors in the Special Province of Yogyakarta. Journal of Economics & Development Studies, Vol. 4. No. 1.

McCann, Philip. 2013. Modern Urban and Regional Economics. USA : Oxford University Press.

Munandar, TB Ai, et.al. 2017. Modified Agglomerative Clustering with Location Quotient for Identification of Regional Potential Sector. Journal of Theoretical and Applied Information Technology, Vol. 95. No. 5. 1191-1199.

Nachnani, Girija V & A.M Swaminathan. 2017. Information Technology Exports and Regional Development in the Leading States: A Shift-Share Analysis of India. Asia-Pacific Development Journal, Vol. 24. No. 1. 83-116.

Putra, Putu Gede Bayu Nugraha & I Nengah Kartika. 2013. Analysis of Potential Sectors in Determining Development Priorities in Badung Regency 2001-2011. E-Journal of Development Economics, Udayana University. Vol. 2. No. 9. 401-405.

Sjafrizal, 2012. Regional and Urban Economics. Jakarta: PT. Raja Grafindo Persada.

Sjafrizal, 2018. Regional Economic Analysis and Its Application in Indonesia. Jakarta: PT. Raja Grafindo Persada.

Sapriadi & Hasbiullah. 2015. Analysis of the Determination of the Main Economic Sector of Bulukumba Regency. Iqtisaduna, Vol. 1. No. 1. 71-86.

Syahputra, Herman, Abubakar Hamzah & Sofyan Syahnur. 2015. Leading Sector Analysis and Changes in Economic Structure of West Aceh District. Journal of Economics, Vol. 3. No. 3. 56-68.

Tambunan, Tulus. 2001. Indonesian Economy. Jakarta: Penerbit Ghalia

Tarigan, Robinson. 2007. Regional Economics: Theory and Application. Jakarta: Bumi Aksara.

Tian, Zheng. 2013. Measuring Agglomeration Using the Standardized Location Quotient with a Bootstrap Method. The Journal of Regional Analysis and Policy, Vol. 43. No. 2. 186-197.

Tristanto, Afrendi Hari. 2013. Analysis of Leading Economic Sectors in Developing Economic Potential in Blitar City. Student Scientific Journal FEB Universitas Brawijaya. Vol. 1. No. 2.

Wahyuningsyas, Rosita, Agus Rusgiyono, Yuciana Wilandari. 2013. Leading Sector Analysis Using PDRB Data (Case Study of Kendal District 2006-2010). Gaussian Journal, Vol. 2. No. 3. 219-228.