

Making Tana Luwu the Mainstream Supporting the Economy of South Sulawesi

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Abstract:- The purpose of this study was to determine, analyze and assess which sectors are the leading sectors in the four regions in Tana Luwu with the Location Quotient (LQ) analysis approach. It was concluded that the economic potential of each region is different. East Luwu Regency has a base sector in mining and quarrying. North Luwu Regency has base sectors in agriculture, forestry and fisheries; electricity and gas procurement; government administration, defense and social security; and educational services. Palopo City has a base sector in electricity and gas procurement; water supply, waste management, waste and recycling; construction; wholesale and retail trade; car and motorcycle repair; transportation and warehousing; financial services; real estate; government administration, defense and social security; and health services and activities. And Luwu District has base sectors in Agriculture, Forestry and Fisheries; electricity and gas procurement; real estate; Government Administration, Defense and Social Security; health services and social activities.

Keywords: Leading Sector, Gross Regional Domestic Product, Location Quotient (LQ), Tana Luwu

I. INTRODUCTION

Tana Luwu is an area in South Sulawesi whose latak is very strategic because it is directly adjacent to three provinces at once, namely the provinces of West Sulawesi, Central Sulawesi and Southeast Sulawesi. With the passing of Law Number 32 of 2004 concerning Regional Government, amendments to Law Number 22 of 1999 concerning Regional Government resulted in the splitting of Tana Luwu into several regions consisting of one city and three districts with Luwu Regency, Palopo City, Regency North Luwu and East Luwu District where Luwu district is the parent district.

The enactment of Law Number 32 Year 2004 and Regional Autonomy allows each regional head to identify and develop leading sectors to develop the regional economy (Amalia, 2012). Regional economic development is a series of systems in which the government and society build integrated communication with each other in managing existing resources (Sanjaya, 2014). The success of regional economic development can be seen by the increase in economic growth that has increased from year to year with the amount of contribution from each sector which shows an

increase in the formation of the GRDP value (Marselin et al, 2016).

High economic growth does not guarantee a large labor absorption (Winanto, 2019). Therefore all components in the structure of regional governance and society must be able to form a systemic communication pattern in order to be able to manage existing resources with the aim of increasing and maximizing all potential in economic sectors, both those categorized as superior and non-superior sectors as an effort to provide welfare to society (Marselin et al, 2016).

Leading sectors are sectors that have a very dominant role in the development of a region (Fauzi and Mutaali, 2017). The role of the leading sectors in developing regional economies needs to be handled properly, this is because the superior sectors that are owned by each region are different so that their development priorities are also different (Putra and Kartika, 2013).

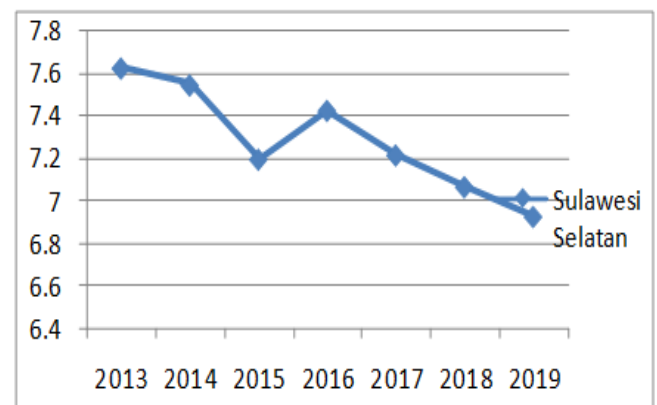


Fig 1:- Growth rate of GDP in South Sulawesi 2013-2019
Source: processed, BPS South Sulawesi province 2020

South Sulawesi's GRDP growth rate has slowed slightly over the last few years. This condition was caused by the economic slowdown in the dominant sectors that supported the economy of South Sulawesi. The agricultural, plantation, forestry and fisheries sectors that support the economy have contracted due to floods that hit several areas some time ago which disrupted at least 13 thousand hectares of agricultural land.

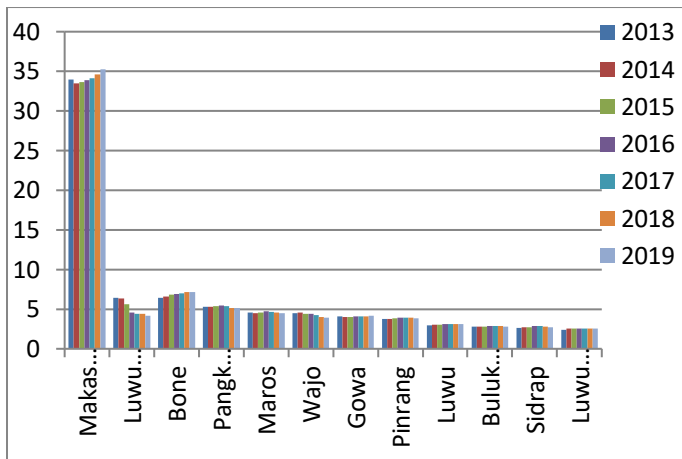


Fig 2:- Twelve regions with the highest GRDP contribution in South Sulawesi

Source: processed, BPS South Sulawesi province 2020

The contribution of the region as a support to the economy of South Sulawesi can be shown from the graph above. The graph above shows the twelve regions with the largest responsibility, with the first position being occupied by Makassar City which is also the capital of the province with a contribution amount in 2013 of 33.94% and 35.29% in 2019. Then it is followed in succession. East Luwu in 2013 was 6.40% and in 2019 it was 4.15%, Bone in 2013 was 6.43% and 2019 was 7.43%, Pangkep in 2013 was 5.28% and in 2019 it was 5.14 %, Maros in 2013 was 4.60% and 2019 was 4.49%, Wajo in 2013 was 4.47% and 2019 was 3.92%, Gowa in 2013 was 4.12% and 2019 was 4.14%, Pinrang in 2013 was 3.80% and in 2019 it was 3.88%, Luwu in 2013 was 2.95% and 2019 was 3.10%, Bulukumba in 2013 was 2.76% and in 2019 it was 2.81 %, Sidrap in 2013 was 2.66% and in 2019 it was 2.75% and the last position was North Luwu with a contribution in 2013 2.43% and in 2019 2.58%.

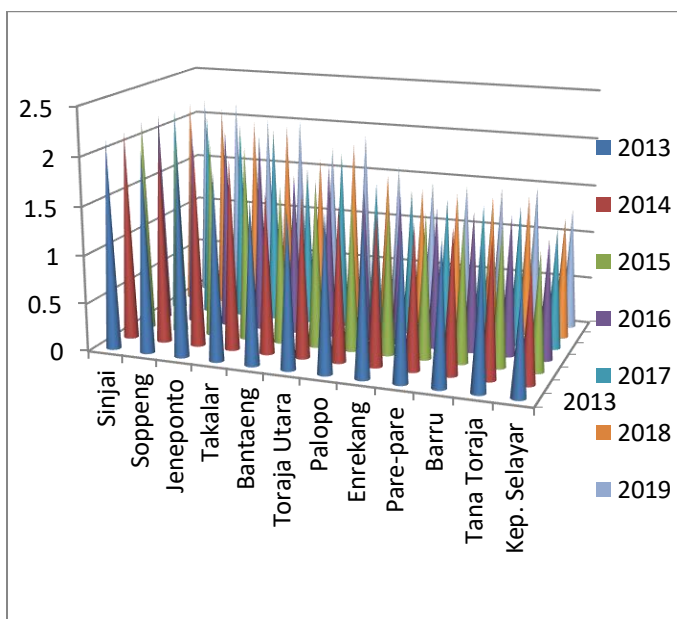


Fig 3:- Twelve regions with the lowest Gross Regional Domestic Product (GRDP) contribution in South Sulawesi
Source: processed, BPS South Sulawesi province 2020

The economic condition of South Sulawesi is at least supported by 24 districts / cities, each of which has a different contribution to the economy. In the graph above, you can see 12 regions with quite small contributions to the smallest contributions. Sinjai as the 13th region that contributed to the economy of South Sulawesi with a contribution rate of 2.15% in 2013 and 2.17% in 2019. Then Soppeng followed by 2.07% in 2013 and 2.00% in 2019, Jeneponto at 2.02% in 2013 and 2.00% in 2019, Takalar at 1.92% in 2013 and 2.01% in 2019, Bantaeng at 1.67% in 2013 and 1.74% in 2019, North Toraja at 1.62% in 2013 and 1.90% in 2019, Palopo at 1.61% in 2013 and 1.57% in 2019, Enrekang at 1.5% in 2013 and 1.44% in 2019, Pare-pare at 1.51% in 2013 and 1.44% in 2019, Barru at 1.47% in 2013 and 1.44% in 2019, Tana Toraja at 1.141% in 2013 and 1.48% in 2019 and the last is Kep. Selayar with the amount of contribution of 1.11% in 2013 and 1.27% in 2019.

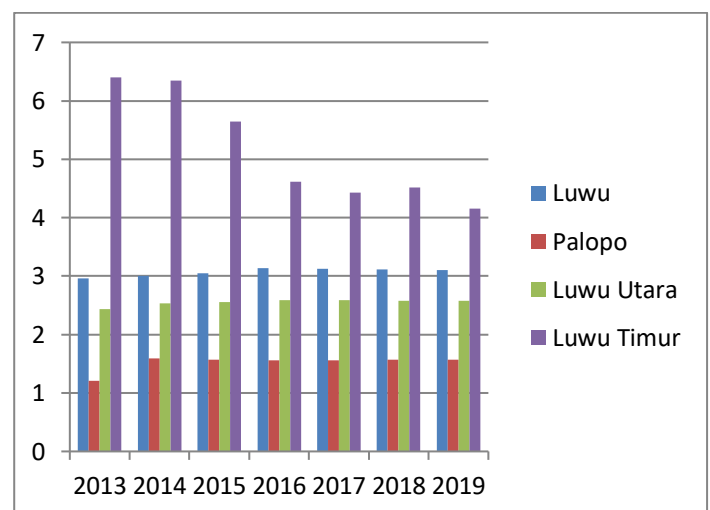


Fig 4:- Contribution of Gross Regional Domestic Product (GRDP) ADHK Districts / Cities in Tana Luwu to Total GRDP of South Sulawesi 2013-2019 (percent)

Source: processed, BPS South Sulawesi province 2020

The amount of contribution to the GRDP of South Sulawesi from each region in Tana Luwu shows the differences and changes that are quite fluctuating every year. This is due to the potential of different economic sectors in each region (Priangga, 2016). The management of economic sectors, both those categorized as superior sectors and those that are not superior sectors, if not correct, will have an impact on unstable economic conditions (Marselin et al, 2016). Therefore local governments must strive for quality development in each economic sector so that it becomes a leading sector (Aufa, 2019).

Based on the phenomenon of the importance of leading sectors in the economy and problems regarding the different characteristics of economic sectors in each region and by looking at the position of the contribution of each region in Tana Luwu to the economy of South Sulawesi, the research objective that the author wants to achieve is to find out, analyze and assess which sectors are the leading sectors in the four regions in Tana Luwu so that by knowing this, it is

hoped that Tana Luwu can become the main stream in supporting the economy of South Sulawesi. With the observation period from 2013 to 2019. And as for the benefits of this research as a contribution of thought for the local government in Tana Luwu in making policies to set priorities in sectoral development.

II. LITERATURE REVIEW

A. Regional Concept

There are three concepts about regional division, namely:

1. A homogeneous area is an area where the space for economic activity is realistic, both in terms of income for the land, socio-culture, geographical location and so on.
2. Nodal area is an area whose economic activity space is controlled by one or several centers of economic activity.
3. The planning area is an area whose economic space is under certain administrative supervision (Arsyad in Fujiansyah, 2019).

B. Regional Economic Development

Regional economic development is a series of processes carried out by the government and society to manage and optimize local resources (Fujiansyah, 2019). Regional economic development is the formation of a pattern of cooperation between the government, society and the private sector (Marselin et al, 2016). Economic development can also be interpreted as an effort to overcome economic problems that occur in society (Hariyanto, 2019). So that it will allow it to form new institutions, new industrial centers and improve the quality of the workforce.

C. Economic Basis Theory

The economic base theory divides the economy into two sectors, namely the basic and non-basic sectors (Ismail, 2019). The base sector is a sector whose ability in production is able to meet the needs of the region, as well as the non-base sector is a sector that is unable to meet its needs from production and requires imports from other regions (Racman, 2019). The magnitude of the role of basic sector activities in the development of a region can also be interpreted as a direct result of the export-oriented sector (Fretes, 2017). Thus the economic basis theory holds that the ability of an export-oriented economic sector will increase due to the rate of economic growth.

D. Leading Sector

The leading sector is basically a condition in which an economic sector is able to compete with the same sector in other regions (Ismail, 2019). It is recognized that an economic sector is said to be a superior sector if it meets several criteria, including:

1. Leading sectors are the main drivers of the economy. This means that the leading sectors contribute to a significant increase in production, income and expenditure.
2. Having forward and backward linkages, both between leading and non-superior sectors.
3. Can last for a long time.
4. Can withstand the existing turmoil.

5. Oriented to sustainable development (Ambardi and Socia in Fujiansyah, 2019).

Previous research conducted by Aufa (2019) using Location Qoutien (LQ) analysis tools and Klassen Typology provided the fact that the agricultural sector; mining and quarrying are the leading sectors in Nagan Raya.

Research by Fujiansyah (2019) with Location Qoutien (LQ) and Shiftshare analysis shows that the agricultural, forestry and fisheries sectors; construction sector; wholesale and retail trade sector; car and motorcycle repair; transportation and warehousing; accommodation and food and drink providers; financial and insurance services; real estate; education services; health and social activities as well as other service sectors are the leading sectors in Pagar Alam City.

Based on the research above, the leading sectors in the context of cities and districts, it turns out that the agricultural sector is still included in the category of leading sectors. However, this condition does not occur in all cities in each province. So that development in all economic sectors is expected to be pursued so that the realization of superior sectors capable of encouraging and moving the regional economy towards a better direction.

E. Framework

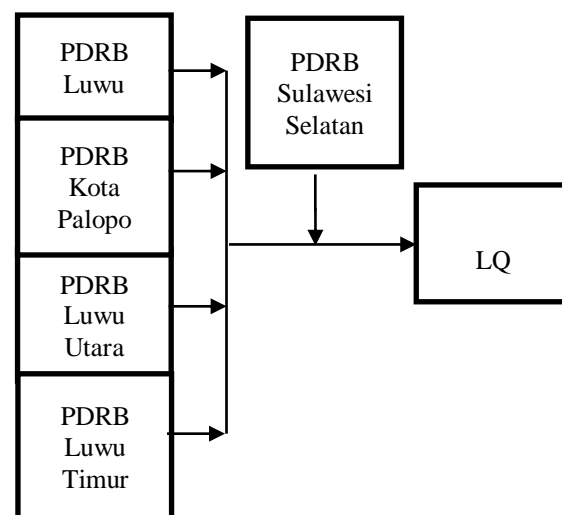


Fig 5:- Conceptual framework

III. RESEARCH METHOD

This research was conducted in Tana Luwu covering 4 areas, namely Luwu Regency, Palopo City, North Luwu Regency and East Luwu Regency. The observation period is seven years from 2013 to 2019. The focus in this study is the leading sectors in Tana Luwu as the support for the economy of South Sulawesi. To answer and see what are the leading sectors in the four regions in Tana Luwu, this research uses the Location Qoutient (LQ) analysis method. By using the GRDP data of each district / city in Tana Luwu and the GRDP of South Sulawesi as a comparison. Where this data is secondary and sourced from the Central Statistics Agency

(BPS). To calculate LQ, the following formula is used (Tarigan, 2015):

$$LQ_{ij} = \frac{X_{ij}/RV_j}{X_i/RV} \text{ atau } LQ_{ij} = \frac{X_{ij}/X_j}{RV_j/RV}$$

Information:

LQ_{ij} = Location Quotient index / coefficient sector I in districts / cities j

X_{ij} = GRDP sector i in regencies / cities in Tana Luwu

X_i = GRDP sector i in South Sulawesi Province

RV_j = Total district / city GRDP in Tana Luwu

RV = Total GRDP of South Sulawesi Province.

Based on the results of the Location Quotient (LQ) calculation, it can be seen that the concentration of an activity in an area with the following criteria:

- a. LQ value = 1. This means that the growth rate of sector i in the study area j area in Tana Luwu is the same as the growth rate of the same sector in the regional economy of South Sulawesi.
- b. The LQ value is greater than 1. This means that the growth rate of sector i in the study area j area in Tana Luwu is greater than the growth rate of the same sector in the regional economy of South Sulawesi. Thus, sector i is the leading sector of study area j as well as an economic basis for further development by study area j; and
- c. The LQ value is less than 1. This means that the growth rate of sector i in the study area j area in Tana Luwu is smaller than the growth rate of the same sector in the regional economy of South Sulawesi. Thus, sector i is not the leading sector of study area j and is not an economic base so that it can be immediately developed further by study area j.

IV. RESULTS AND DISCUSSION

The use of data from the GRDP of South Sulawesi Province and the GRDP of 4 regions in Tana Luwu to analyze and see each economic sector that is included as a base sector and a non-basis sector. Location Qoution (LQ) analysis requires that if, LQ > 1, then the sector is a base sector and LQ < 1, then the sector is a non-basis sector which means that it needs special attention from the local government.

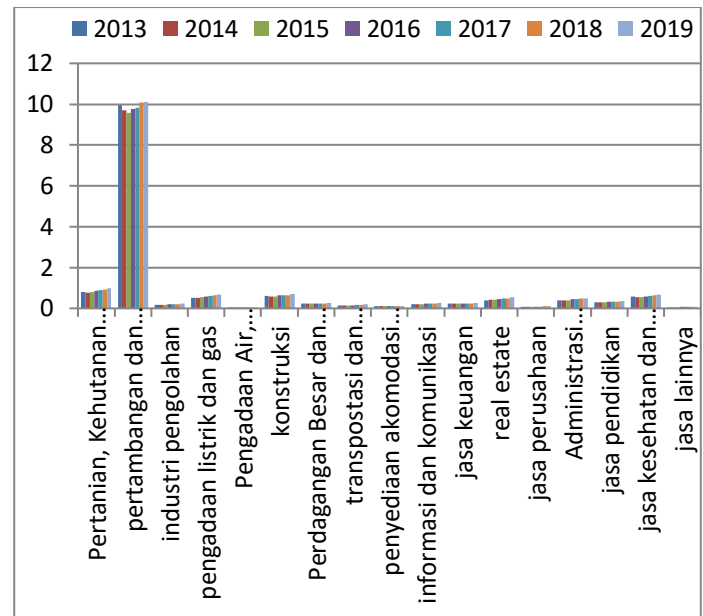


Fig 6:- The results of the location quotient calculation for East Luwu for the period 2013-2019

Source: processed based on the results of Ms. Excel

The difference in the value of the East Luwu LQ calculation is very clear in the mining and quarrying sector whose value is at LQ > 1, namely 9.95 respectively; 9.70; 9.57; 9.78; 9.84; 10.09; 10.11 in 2013 to 2019. This means that this sector is the base sector in East Luwu and is the only base sector of the 17 existing economic sectors. The dominant non-base sectors to become the base sector are agriculture, forestry and fisheries with an LQ value of 0.98; LQ construction sector of 0.70; the health services sector and social activities with an LQ value of 0.67; the electricity and gas procurement sector with an LQ value of 0.66 and the real estate sector with an LQ value of 0.54 each in 2019. The remaining sectors that need special attention in order to become the base sector are the manufacturing industry; Water Supply, Waste Management, Waste and Recycling; Wholesale and Retail Trade; Car and Motorcycle Repair; transportation and warehousing; providing accommodation and food and drink; information and communication; financial services; company services; Government Administration, Defense and Social Security; education services and other services. This sector has an LQ value below 0.5 with the lowest LQ value of 0.08 for other service sectors.

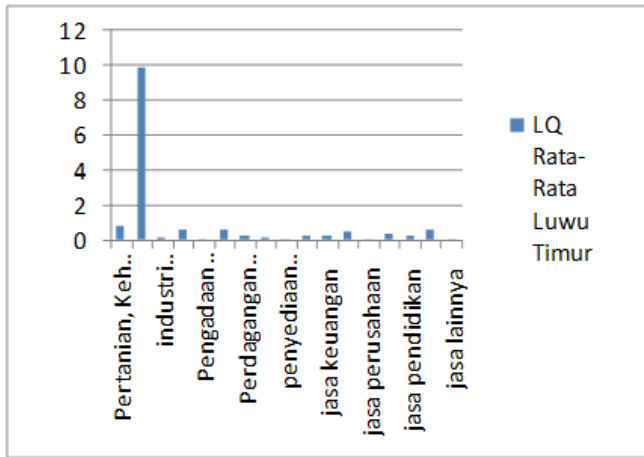


Fig 7:- The results of the calculation of the average location quotient for East Luwu for the period 2013-2019

Source: processed based on the results of Ms. Excel

Based on the results of the analysis that has been carried out, the results were found as shown in graph 5 above. This graph provides evidence that the average location quotation of 17 economic sectors in East Luwu district, there is only one sector that has an $LQ > 1$, namely the mining and excavation sector with an average LQ value of 9.86%, meaning that the higher the LQ value of an economic sector, the higher the potential advantage of that sector. This condition is very reasonable because in East Luwu district there are several large companies engaged in mining and excavation, for example PT. Vale Indonesia Tbk, PT. Prima Utama Lestasi and several other mining companies. The abundant natural resources make East Luwu Regency one of the biggest nickel exporters in Indonesia. Meanwhile, the other 16 sectors have $LQ < 1$ which means that these sectors are not base sectors. There are many factors that influence a sector to move from a non-base sector to a basic sector, including the function of the district government as the maker and the power holder must understand and know the geographical conditions of the region and the conditions of the economic sectors so that policy direction is in line with the conditions of the region.

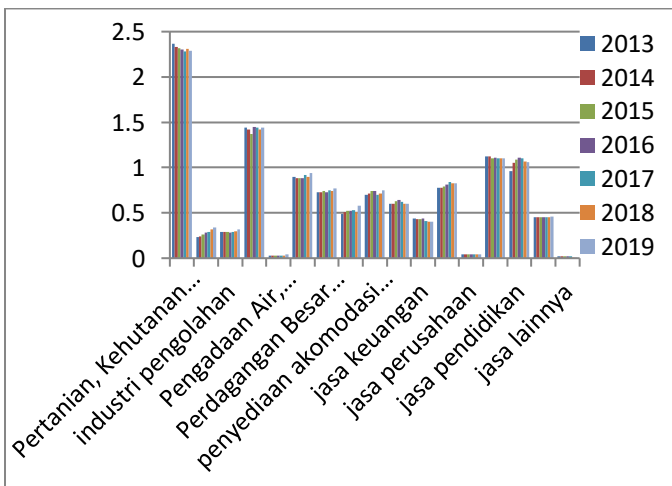


Fig 8:- The results of the calculation of the average location quotient for North Luwu for the 2013- 2019 period

Source: processed based on the results of Ms. Excel

Judging from the results of the LQ calculation during the period 2013-2019, the average LQ value which is categorized as a base sector that has an $LQ > 1$ is 2.3% for the agriculture, forestry and fisheries sectors; 1.43% for the electricity and gas procurement sector; 1.1% for the government administration, defense and social security sectors; and 1.06% for the education services sector. Based on the data above, there are two sectors that are expected to become the base sector in the next few years, namely the construction sector with an average LQ value of 0.9% and the real estate sector with an average LQ value of 0.81%.

Fig 7:- The results of the location quotient calculation for North Luwu for the 2013-2019 period

Source: processed based on the results of Ms. Excel

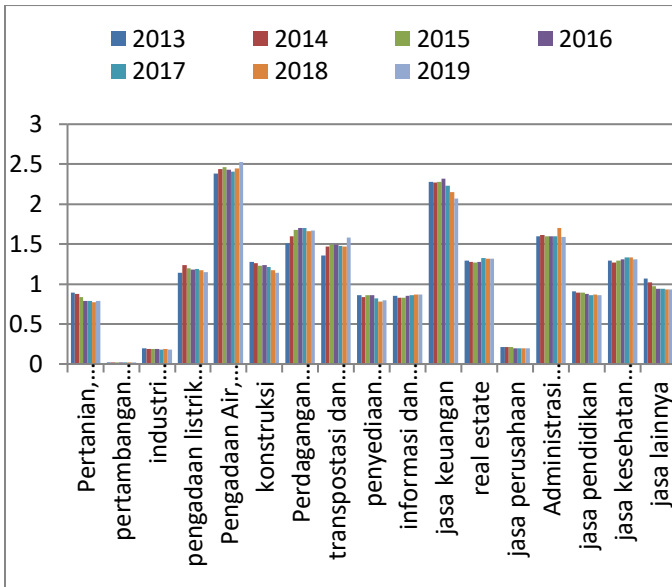


Fig 9:- The results of the Palopo location quotient calculation for the 2013-2019 period
Source: processed based on the results of Ms. Excel

Based on the results above, it can be identified the sectors which are the basic sectors in Palopo. In the last 7 years, there have been at least 9 economic sectors that have consistently become basic sectors, namely the electricity and gas procurement sector; Water Supply, Waste Management, Waste and Recycling; construction; Wholesale and Retail Trade; Car and Motorcycle Repair; transportation and warehousing; financial services; real estate; Government Administration, Defense and Social Security; and health services and activities. Furthermore, the economic sectors that are not categorized as basic sectors in Palopo are based on the LQ calculation results in the graph above, namely the Agriculture, Forestry and Fisheries sectors; mining and quarrying sector; processing industry sector; the sector of providing accommodation and food and beverages; information and communication sector; corporate service sector; education service sector; and other service sectors.

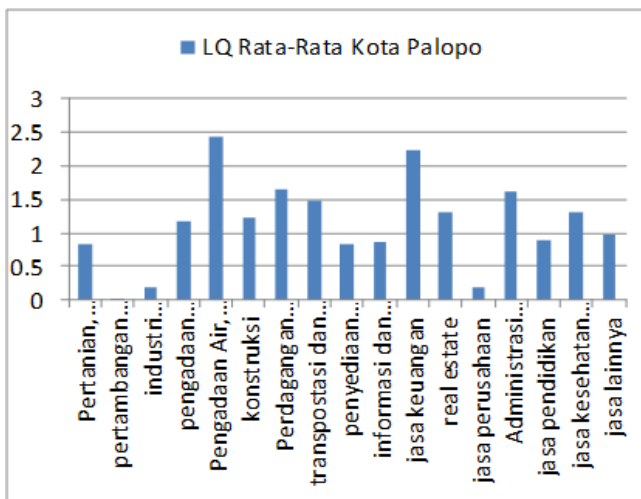


Fig 10:- The results of the calculation of the average Palopo location quotient for the 2013-2019 period
Source: processed based on the results of Ms. Excel

Graph 10 presents the results of the calculation of the average LQ, it can be seen that the average LQ for each economic sector of Palopo is as follows: Agriculture, Forestry and Fisheries sectors of 0.82%; mining and quarrying 0.02%; processing industry 0.19%; electricity and gas procurement 1.18%; Water Supply, Waste Management, Waste and Recycling of 2.44%; construction at 1.22%; Wholesale and retail trade, car and motorcycle repair 1.64%; transportation and warehousing by 1.48%; the provision of accommodation and food and drinks by 0.83%; information and communication 0.85%; financial services 2.23%; real estate 1.3%; company services 0.2%; Government Administration, Defense and Social Security 1.16%; education services at 0.88 %; health services and social activities by 1.31%; other services by 0.97%.

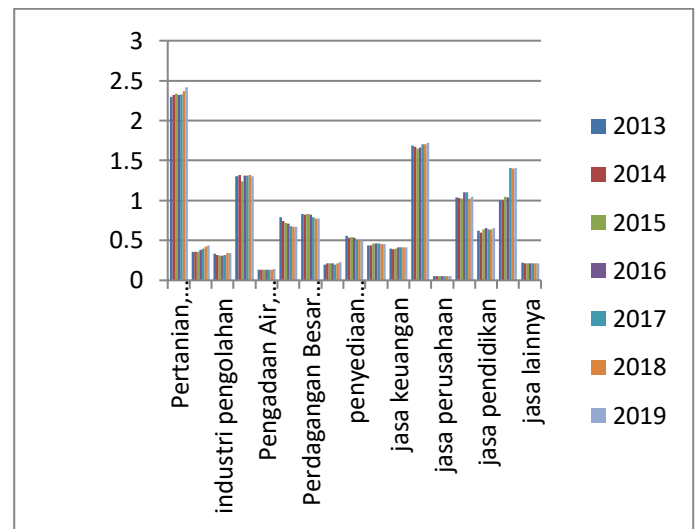


Fig 11:- Calculation of Luwu's location quotient for the 2013-2019 period
Source: processed based on the results of Ms. Excel

The value of the calculation of $LQ > 1$ in the economic sector is a sign that this sector has the potential to export to other regions, both between regions, provinces and exports abroad. The graph above depicts the condition of Luwu's economic sectors, where it can be concluded that the sectors that have the potential for export or as a base sector are

Agriculture, Forestry and Fisheries; electricity and gas procurement; real estate; Government Administration, Defense and Social Security; health services and social activities. Apart from that, other sectors that need attention so that they become the basis or priority sectors for export are mining and quarrying; processing industry; Water Supply, Waste Management, Waste and Recycling; construction; Wholesale and Retail Trade, Repair of Automobiles and Motorcycles; transportation and warehousing; providing accommodation and food and drink; information and communication; financial services; company services; education services; other services.

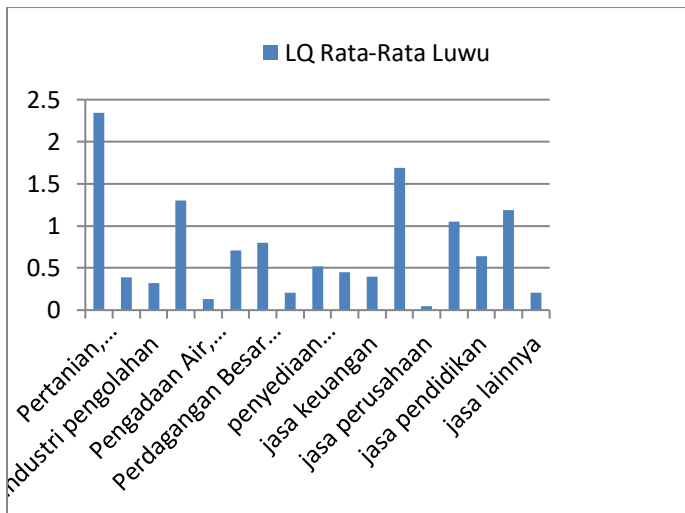


Fig 12:- The results of the calculation of the Luwu average location quotient for the 2013-2019 period

Source: processed based on the results of Ms. Excel

The results of the calculation of the average LQ for Luwu can be presented by the data as shown in Figure 12 above, that the basis for decision making to determine the basis and non-base sectors is $LQ > 1$ for the base sector and $LQ < 1$ for the non-base sector. Based on this and based on the average LQ value, agriculture, forestry and fisheries are classified as 2.34%; electricity and gas procurement 1.3%; real estate 1.699%; Government Administration, Defense and Social Security 1.05%; health services and social activities by 1.19%.

V. CONCLUSION

Based on the data analysis that has been done, the results of the Location Quotient (LQ) calculation from 4 areas in Tana Luwu show different results.

- East Luwu Regency in the 2013 - 2019 research period shows that out of 17 economic sectors there is only 1 basic sector, namely the mining and excavation sector, even though East Luwu is in the second position of the second largest GDRP contributor for South Sulawesi Province. However, since 2016 - 2019 there has been a significant decrease in contribution, namely 1.5%, so that in 2019, East Luwu is in the fifth position of the GDP contributor to the South Sulawesi economy. Of course, this should be of particular concern to the East Luwu Regency government, besides keeping the mining and excavation sector as a base sector, the government must also make efforts so that other sectors can move into the base sector. So that East Luwu is again in the second position of the GDP contributor to the economy of South Sulawesi.
- North Luwu Regency in the 2013 - 2019 research period shows that there are 4 economic sectors which are the basic sectors, namely Agriculture, Forestry and Fisheries; electricity and gas procurement; Government Administration, Defense and Social Security; and educational services. North Luwu is consistently in the twelfth position as a contributor to GRDP for South Sulawesi Province.

- Palopo City in the 2013 - 2019 research period shows that there are 9 economic sectors into the basic sector, namely the electricity and gas procurement sector; Water Supply, Waste Management, Waste and Recycling; construction; Wholesale and Retail Trade; Car and Motorcycle Repair; transportation and warehousing; financial services; real estate; Government Administration, Defense and Social Security; and health services and activities. The large number of economic sectors that are the basic sectors does not make Palopo city one of the 12 largest contributing regions of GRDP to the South Sulawesi economy, but Palopo is in the nineteenth position of the GRDP contributor from 24 districts / cities in South Sulawesi. Of course this condition occurs in average every year the city of Palopo only contributes 1.56% to the GRDP of South Sulawesi.
- Luwu Regency in the 2013 - 2019 research period shows that there are 5 basic sectors, namely Agriculture, Forestry and Fisheries; electricity and gas procurement; real estate; Government Administration, Defense and Social Security; health services and social activities. As the oldest area in Tana Luwu, Luwu district should be expected to be the area with the largest contribution among other areas in Tana Luwu, but in fact it is only in the ninth position and very much different from East Luwu which was once in second place even though this area is new. bloomed 18 years ago.
- Basically, the ability of economic sectors to grow into leading sectors varies from region to region. So in the results of this study provide advice to the head of the region and all levels of government should work together to advance the region they lead. The strategic role of the regional head as head of government in the region should be able to make life and the wheels of the economy run well. The regional head should understand the strategies in regional economic development where the strategy is categorized into four major parts, namely the physical development strategy, the business development strategy, the human resource development strategy and the development strategy for the development of community groups.
- This research is limited to the analysis and data used. In this study, the analysis used focused on Location Quotient analysis and only 4 areas in South Sulawesi province. It is hoped that further researchers can add other research methods not only limited to the location quotation method.

REFERENCES

- [1]. Aufa, S. 2019. Analisis Sektor Unggulan Di Kabupaten Nagan Raya Tahun 2012 – 2017. *Jurnal Ekonomika Indonesia*, Volume VIII No 1.
- [2]. Amalia, F. 2012. Penentuan Sektor Unggulan Perekonomian Wilayah Kabupaten Bone Bolango Dengan Pendekatan Sektor Pembentuk Pdrb. *Jurnal Etikonomi* Vol. 11 No. 2

- [3]. Fauzi, M & Mutaali, L. 2017. Analisis Sektor Unggulan Dan Hubungannya Dengan Perkembangan Perekonomian Wilayah Di Provinsi Sumatera Utara. *Jurnal Bumi Indonesia* Volume 6 No 1
- [4]. Fretes, P. N. 2017. Analisis Sektor Unggulan (Lq), Struktur Ekonomi (*Shift Share*), Dan Proyeksi Produk Domestik Regional Bruto Provinsi Papua 2018. *Jurnal Develop*, Volume 1 No 2
- [5]. Fujiansyah, D. 2019. Analisis Sektor Unggulan Kota Pagar Alam. *Jurnal Ekonomia*, Vol. 9, No. 1.
- [6]. Hariyanto, S 2019. Analisis Penentuan Sektor Unggulan Dan Klasifikasi Pertumbuhan Ekonomi Daerah Di Kabupaten Temanggung Tahun 2011-2014. *Skripsi thesis, Universitas Muhammadiyah Surakarta*.
- [7]. Ismail, A. N. 2019. Analisis Penentuan Sektor Ekonomiunggulan Terhadap Pengembangan Perekonomian Di Kabupaten Blitar. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, Voleume 3 No 2.
- [8]. Marselin, S. Kalangi, J. B. & Wauran, P. C. , 2016. *Commodity Sector Analysis Identification And Economic Structure In Kota Palu (Years 2011-2014)*. *Jurnal Berkala Ilmiah Efisiensi* , Volume 16 No. 3.
- [9]. Priangga, A. 2016. Analisis Potensi Pengembangan Pusat Pertumbuhan Ekonomi di Kabupaten Karanganyar 2009-2013. *Economics Development Analysis Journal*, Volume 5 No 3.
- [10]. Putra, P. G. B. N. & Kartika, I. N. 2013. Analisis Sektor-Sektor Potensial Dalam Menentukan Prioritas Pembangunan Di Kabupaten Badung Tahun 2001-2011. *E-Jurnal EP Unud*, volume 2 No 9.
- [11]. Racman, I. A. R. 2019. Analisis Sektor Unggulan Dalam Perekonomian Kabupaten Malang. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, Voleume 7 No 2.
- [12]. Sanjaya, 2014. Analisis Sektor Unggulan Dan Potensi Pertumbuhan Ekonomi Di Kota Madiun Tahun 2007-2011. *Skripsi thesis, Universitas Muhammadiyah Surakarta*.
- [13]. Tarigan, R. 2015. *Ekonomi regional teori dan aplikasi*. Jakarta: PT. Bumi Aksara.