

# **THE ECONOMIC GROWTH PATTERN ANALYSIS OF AJATAPPARENG REGION USING KLASSEN TYPOLOGY APPROACH**

**Muhammad Hatta**

Lecturer at Muhammadiyah Parepare University, Indonesia

[muhammadhatta@umpar.ac.id](mailto:muhammadhatta@umpar.ac.id)

**Tri Astuti** 

Student at Hasanuddin University, Indonesia

[astutijaudin@yahoo.co.id](mailto:astutijaudin@yahoo.co.id)

## **Abstract**

*This research seeks to analyze and provide solutions to reduce the degree of inequality in terms of distribution of economic growth and increased income among the five districts/cities in Parepare Leading Region (Ajatappareng Region, Indonesia) using Klassen Typology Approach, and providing advice and policy strategy. The results showed that the leading sectors is Procurement Electricity and Gas sector, contained in Pinrang and Parepare. Klassen Typology Approach classifying the district/city in the Ajatappareng Region included in the relatively disadvantaged areas (Relatively Backward Region) so they have to get the attention and efforts to increase employment through of labor-based technology. Based on these results obtained records that needs to create new growth center, increase integration and interconnectivity throughout the region, necessary to identify as well as to the areas that have the potential of leading economy. The government can be more wisely in determining the development priorities, necessary to revitalize all sectors in each district/city to increase productivity and professionalism in managing the potential sectors in order to have competitive and comparative advantages.*

**Keywords:** *Economic Growth Pattern, Leading Region, Mainstay, Klassen Typology*

## INTRODUCTION

According to Todaro and Smith (2006), the main purpose of economic development besides creating economic growth as high, should also to remove and reduce the level of poverty, inequality and the unemployment rate. Therefore it is necessary for the selection of appropriate development policies. Sukirno (2002) said that economic growth in the economy means development activities that led to the goods and services produced within the community to grow and increase the prosperity of society.

Indonesia as an archipelagic country in the tropics, is rich in resources and has a different characteristic of the area. Different characteristics of the region will affect the ability to grow and resulted in several regions were able to grow quickly while other areas is slower. The government through the Law of the Republic of Indonesia Number 25 Year 2004 on National Development Planning System, explained that national and regional development planning is an activity that ongoing and continuous follow a certain pattern based on the result of careful study. South Sulawesi Province is part of the Unitary Republic of Indonesia who have the condition and the economic potential of the region is quite diverse. Through the South Sulawesi Provincial Regulation Number 9 of 2009 on Spatial Planning Year 2009-2029 South Sulawesi Province, South Sulawesi provincial government formed a Four Leading Regions to boost economic growth, which is a key region: Mamminasata, Palopo, Bulukumba-Watampone, and Parepare. With the implementation of this development strategy, South Sulawesi in mid-2017 was able to achieve the highest economic growth areas in Indonesia, mainly contributed by the agriculture, forestry, and fisheries.

Mainstay of Parepare and surrounding region, is an area which includes the development of Parepare, Barru, Sidenreng Rappang, Pinrang and Enrekang with service centers located in Parepare town. Regional development is focused on agro-industrial sector, agriculture and plantation. In the context of the development of the national territory known as the Integrated Economic Development Zone (KawasanPengembanganEkonomiTerpadu/KAPET).

As one of the mainstays in South Sulawesi Province which has the highest regional rate of economic growth in Indonesia, the author is interested in studying how the pattern of economic growth in the Leading Region of Parepare and its surroundings. Parepare and its surroundings leading region commonly referred to as Ajatappareng Region, consisting of five districts/cities in which each region has different characteristics in terms of ownership of Natural Resources and Human Resources. The purpose of this study was to determine the pattern of economic growth in the leading region of Parepare and its surroundings so can be a point of

comparison and reference for local development planning. To achieve these objectives, this study used Klassen Typology analysis approach.

## LITERATURE REVIEW

### Overview of Theory

#### *Economic Growth Theory*

According Sukirno(2006), economic growth is a quantitative measure that describes the development of an economy in a certain year when compared with the previous year. Meanwhile, according to Kuznets (1966) in Jhingan (2004: 57) define economic growth as a continual rise in product per capita or per worker, which is often accompanied by rising population and usually with structural changes.

Thus, it can be concluded that economic growth is a change in the level of economic activity that lasts from year to year. Economic growth of a country and regional levels can be seen from the level of income. National income leads to the Gross Domestic Product (GDP) while revenues in regional level leads to the Gross Regional Domestic Product (GRDP), the value of goods or services produced within a country or region in a particular year by using factors of production belong to citizens and owned by residents in other countries. The factors that determine economic growth by Sukirno (2002) are: Land and Natural Resources Others, Number and Quality of Population and Labor, Goods Capital and Technology Level, and Social Systems and Attitude community.

The Central Statistics Agency (BadanPusatStatistik/BPS) of Indonesia (2016) measures the GDP using three approaches, namely: Production Approach, where the GDP is the total value of final goods and services produced by the various production units in an area within a specified period (one year);Income Approach, where the GDP is the amount of remuneration received by production factors which participate in the production process in a region within a specified period (usually one year); and the Spending Approach, where the GDP is the sum of all the components of final demand, ie consumption expenditure household and private institutions are non-profit, government consumption, gross domestic fixed capital formation, stock changes, and net exports, within a specified period (one year). While the growth rate of Gross Domestic Product (GDP) is calculated by subtracting the value of GDP in year n to the value in year n-1 (previous year), divided by the value in year n-1, then multiplied by 100 percent. The rate of growth shows the development of aggregate income of a specified time to an earlier time.

### ***Theories of Regional Economic Growth***

Tarigan (2005) said that the emphasis of regional economic growth is more focused on the effect of different characteristics of space to economic growth. Meanwhile, the factors that is a major concern in the regional economic growth theory are the location advantage, agglomeration traffic migration and capital flows between regions. The theory of regional economic growth is divided into four groups cited by Emilia &Imelia (2006) in the Utama (2010: 26), namely:

#### **a. Export Base Models**

This theory was pioneered by Douglas C. North who argue that the economic growth of the region will be determined largely by the type of location advantage (comparative advantage) and can be used by the county as export strength.

#### **b. Neo Classical Model**

NeoModel Klassik in Simon Kuznets theory says that there is a relationship between the growth rate of a country with the difference being of the district (regional disparity) in the country concerned.

#### **c. Model Cumulative Causation (Keynes)**

According to Dixon and Thirwall in 1974, each country will have Verdoorn effect, which means there is no decline in the differences in prosperity levels between regions despite the relatively advanced countries. Increasing equitable development can not be simply left to the market mechanism, but it can be done through the active intervention of the government in the form of regional development programs.

#### **d. Model Core Periphery**

John Friedman in the theory says that steps urban development (core) will be determined largely by the state of the villages (periphery) vicinity, and vice versa. According to John Friedman aspects of interaction between regions (spatial interaction) in the core periphery relationship may occur due to market expansion, the discovery of new resources, the improvement of transportation infrastructure, and the spread of technology among the regions.

Tarigan (2005) revealed, after the regional autonomy, each region has more freedom in setting the priority sector or commodity development. The ability of local government to see which sector has the advantage or weakness in the region is becoming increasingly important. Sectors which have advantages, have better prospects for development and is expected to encourage other sectors to flourish.

### ***Patterns and Regional Economic Structure***

Economic growth relates to the development process and the single dimension measured by the increased production and income. Differences in economic growth will bring each region to form a pattern and structure of economic growth that can be classified into classes (Sumitro, 1994 in Erawati&Yasa 2012). The regional grouping according to the structure of the growth and development will be very important as a basis for consideration in the formulation of policies and regional development programs (Syafrizal, 2016).

Klassen Typology is an analytical tool that can be used to identify the sectors, sub-sectors of business, or commodities or featured a priority area. Klassen Typology analysis tool is a combination or blend of tools Location Quotient (LQ) and Growth Ratio Model (MRP). Klassen Typology can be used through two approaches, namely the sectoral and regional levels. The data used in this analysis is data Gross Regional Domestic Product (GRDP).

Klassen Typology sectoral approaches yield four classification of sectors with different characteristics. The data used is the rate of growth and the contribution of each sector. Four classifications are: Leading Sector/mainstay, is the forward sector and grow rapidly classified in Quadrant I; Potential Sector, classified in Quadrant II; sector is growing rapidly, are classified in Quadrant III; and sector is relatively disadvantages/backward classified in Quadrant IV.

A second approach to Klassen Typology analysis is the regional approach that has a similar concept with a sectoral approach, but the difference is the type of data used is the data rate and per capita income growth. In this approach, the area is divided according to the classification of the area in the quadrant as follows: The area of advanced and fast-growing (rapid growth region) are classified in Quadrant I, Regional advanced but depressed (retarded region) are classified in Quadrant II, The area is growing fast (growing region) are classified in Quadrant III, and the area is relatively lagging behind (relatively backward region) are classified in Quadrant IV.

This grouping is dynamic because it depends on the progress of development activities in the district and the city concerned. This means that in a few years, the grouping will change according to the development and the growth rate of per capita income level of the region concerned. The change will easily occur in the area where conditions have been close to the limit of the average of the growth rate and per capita income community

### **Past Research**

PurwoNugroho, 2014 in a study entitled Analysis of Economic Growth and Disparities Between the District Level In Demak Regency Year 2008-2010, shows that the calculation results Demak

Shift share dominant negative, indicating that the economy Demak has not experienced improvements in economic performance.

Fajar Putra Utama, 2010 in Analysis of Economic Growth and Inequality Levels In District/City All Involved In Kedungsepur Region in 2004-2008. The results showed that: the manufacturing and agricultural sectors, including sectors that have the potential to stimulate economic growth each regency/city in Kedungsepur. Income inequality between regions in the years 2004-2008 is low ( $<0.5$ ) and is likely to remain.

Devi NuritaNovianti, 2014 in Analysis of Economic Growth and Income Inequality Level Inter-District/Municipality in the province of Yogyakarta from 2003 to 2013, show that income inequality between districts/municipalities in the province of Yogyakarta is high ( $> 0.5$ ), namely with Williamson Index analysis was 0.71 and analysis Theil Entropy index of 4.35. Meanwhile, the hypothesis of the curve "U" Kuznets inverted depicting Yogyakarta Special Region in 2003-2012, the relationship between growth and inequality index is not valid in the province of Yogyakarta.

However there are some things that distinguishes this study with previous research analysis tools used and the locations and objects for research that Ajatappareng region in the province of South Sulawesi.

### **Conceptual Framework**

Implementation of economic development both nationally and regionally has a goal to improve the welfare of the community. Indicators that affect the economic development of an area covering economic growth, economic structure, and the degree of inequality between communities, between regions and between sectors. Economic growth and equitable distribution of economic development between the state/city in Ajatappareng region in South Sulawesi Province, can be seen through the level of the GRDP. The GRDP is the total value of final goods and services produced by all economic units in a region.

This research seeks to analyze and provide solutions to reduce the degree of inequality in terms of distribution of economic growth and increased income among the five districts/municipalities in Ajatappareng Region with Klassen Typology approach. Klassen Typology analysis is used to determine the pattern of economic growth with the classification of sectors by accelerating growth and market share, and classify the regions based on the GRDP growth rate and per capita income. Then provide advice to relevant local governments in the form of strategies and policies in order to achieve economic growth and equitable distribution business increased revenue district/city in Ajatappareng Region, South Sulawesi province.

## Hypothesis

Based on the background and literature review above, the authors put forward the hypothesis that the pattern as well as the classification of economic growth in five districts/municipalities in Ajatappareng Region according Klassen Typology supposedly included in Quadrant I is the area developed and grew rapidly with the sector superior is the Agricultural sector, Forestry, and Fisheries.

## METHOD

This study takes place in the leading region of Parepare and its surroundings, also known as Ajatappareng region, which consists of five Districts/Cities are Sidrap, Pinrang, Barru, Enrekang and Parepare. As for the time of study began in May until July 2017. The analysis method used in this research is descriptive statistical analysis that serves to describe or give a picture of the object under study through a data sample or population (Sugiyono, 2010). Data or information obtained and described in accordance with the results of data processing and presented in the form of a sentence then drawn a conclusion.

The population in this study is the GRDP of five districts/cities in Ajatappareng Region, South Sulawesi Province, the period 2011-2015. In this study, the entire population is at once the sample data-extracted through field studies (field research) and literature/library research (library research). Data needed in this research is entirely secondary data in the period 2011-2015 sourced from the Central Statistics Agency (BPS) in five districts/cities Ajatappareng Region, South Sulawesi Province.

The data used is quantitative data that is data in the form of numbers, percentages, and other statistical data. To see the pattern of economic growth showed characteristic differences between sectors of economic growth and regional growth structure in Ajatappareng region used Klassen Typology analysis tools.

## RESULTS AND DISCUSSION

Ajatappareng region includes five Districts/Cities i.e. Sidrap, Pinrang, Barru, Enrekang and Parepare with a total area of 6905.08 km<sup>2</sup> consisting of 46 regional districts, 132 villages, and 288 country villages. Profile of Regency/City in Ajatappareng Region Economy and South Sulawesi as a reference area is calculated according to current prices is based on the undertaking of the period of 2011-2015 can be seen in the following figure.

Figure 1. GRDP Districts/Cities of Ajatappareng Region and South Sulawesi Period 2011-2015 (Billion Rupiah)



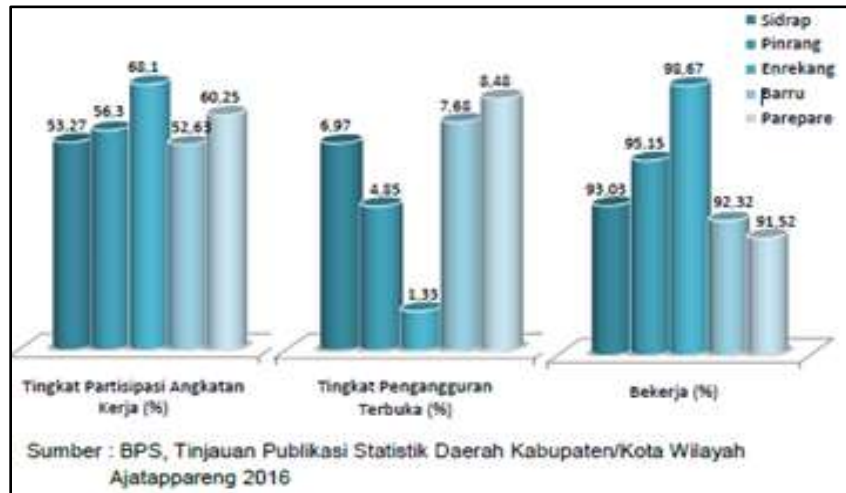
From the figure above shows that the regions with the largest total GRDP in 2015 was Pinrang with the value of GRDP in 2015 amounted to Rp. 13,142,356,000.90 billion while the lowest value of GRDP is owned Barru Rp. 4,918,367,000.60 billion.

Labor statistics show that the Labor Force Participation Rate of the total working-age population in the district/city located in the Ajatappareng Region in 2015 ranges from 50-60%. If the terms of the unemployment rate, Enrekang has the lowest unemployment rate. Employment statistics Regency/City in Ajatappareng Region can be seen in Figure 2 below.

Judging from the data of residents working in the business field in 2015, the agriculture, forestry, and fisheries absorb some large workforce in the four districts as follows: 40.27% in Sidrap, 53.60% in Pinrang, in Enrekang 66.48%, and 39.67% in Barru. Especially for Parepare, trade and services sectors most dominating undertaking of the population, which amounted to 34.74% and 29.22%. Based on this data, it appears that the sector was instrumental in the formation of regional economic Ajatappareng is Agriculture, Forestry, and Fisheries. This is in line with economic conditions in the province of South Sulawesi, which amounted to 67.31% during the period 2011-2015 the economy was formed by agriculture, forestry, fishery, manufacturing industry sector, construction sector, and the trade sector.

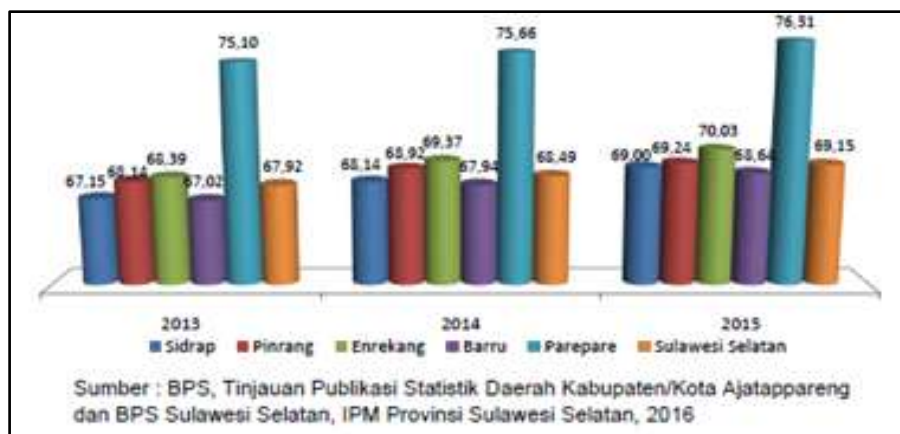


Figure 2. Labor Statistics of Districts/Cities in Ajatappareng Region, 2015



Human development as measured by the Human Development Index (HDI) is a combination of several components, namely component life expectancy, hope the old school, the average length of school, and spending. Fourth components of IPM are each showed an increase in the District and Cities of Ajatappareng Region from year to year, and HDI Parepare is the highest during the period 2013-2015. HDI level conditions in the area Ajatappareng can be seen from Figure 3 below.

Figure 3. Comparison of HDI in Ajatappareng District/City Regional and South Sulawesi Province Years 2013-2015



The GRDP per capita is one of the indicators to measure the level of social welfare where the greater per capita income of an area the better the level of welfare. Conversely, the smaller GRDP per capita of a region, the lower the level of welfare. GRDP per capita of each

District/City Ajatappareng Region calculated based on current prices 2011-2015 period can be seen in Figure 4 below.

Figure 4. Per capita GRDP in Ajatappareng District/City Regional Period 2011-2015 (million USD)



To find an overview of the structure and pattern of growth economic analysis of each area used Klassen Typology analysis tool with a sectoral approach and a regional approach. Here are the results Klassen Typology analysis:

### Analysis of the Sectoral Klassen Typology Approach

Based on Klassen Typology analysis of the sectoral approach in Sidrap, shows that the sector is obtained not included in the category of leading sectors (Quadrant I) over the analysis period. While the sector is included into potential sectors that could potentially be the leading sectors are the sectors of Agriculture, Forestry, and Fisheries, sectors of Manufacturing, Electricity and Gas Supply sector, construction sector and Real Estate sectors. Sectors that goes into growing sectors in Quadrant III is the information and communication sector. In addition to the large number of potential sectors in Sidrap, looks also not lose many sectors are still lagging behind in Sidrap.

Sectors that are included in the category as a leading sector in Pinrang is Procurement Electricity and Gas sector. In other words, in the district Pinrang the sector is performing economic growth and a larger share than any other region in the province of South Sulawesi. Then there is one sector that is included in quadrant II, namely Agriculture, Forestry, and Fisheries. The next sector is categorized into Quadrant III, Information and Communications sector. While 14 other sectors including into the sector still remain lagging in Pinrang.

Enrekang in sectors that are not categorized as a leading sector. While the sector is classified as a potential sector became the leading sectors are the sectors of Agriculture, Forestry and Fisheries, Construction sector and sectors Administration, Defense and Compulsory Social Security. In quadrant III, sectors that can be classified into a growing sector is the sector of Water Supply, Waste Management, Waste and Recycling. While 12 other sectors included in the still lagging sector in Enrekang.

The results of the next study also shows that there is no sector is a leading in Barru over the analysis period. While the sectors that can be classified as a potential sector is the sector of Agriculture, Forestry and Fisheries, Electricity and Gas Supply sector, Construction sector, Real Estate sector, the sector of Public Administration, Defense, and Compulsory Social Security and the sector of Health Services and social activity. Then the sector can be categorized into the growing sector is the Mining and Quarrying sector and the sector of Information and Communication. While nine other sectors are still included in the economic sectors that are still lagging behind in Barru.

Grouping economic sectors in Parepare included in the leading sector is Electricity and Gas Supply sector. Furthermore, during the period of analysis is not obtained potential sectors. Klassen Typology analysis also found that in Parepare there are many sectors that are categorized as growing sectors in Quadrant III. These sectors include the sectors of Water Supply, Waste Management, Waste and Recycling, Construction sector, Wholesale and Retail, Repair Cars and Motorcycles sectors, Transport and Warehousing sector, Provision of Accommodation and Eat Drink sector, sector of Information and Communications, Financial Services sector and the insurance sector, the Real Estate sector, sector of Public Administration, Defense and Social Security Mandatory, sector of educational services, and also Health Services and social activity and other services sectors. From the analysis, the City of Parepare is a region that has at least the sectors included in quadrant IV compared with Regency/City in Ajatappareng region. The sectors included in Quadrant IV, namely the sectors of Agriculture, Forestry and Fisheries, Mining and Quarrying sector, sector of Manufacturing and sector of companies service.

Of the four districts and one town is located in Ajatappareng Region, there are only two areas that have a leading sector during the period of analysis, that are Pinrang and Parepare. The leading sector is the Electricity and Gas Supply sector. As for the potential sectors and growing sectors each accounted for 17 sectors. While the lagging sectors in sequence dominated by Pinrang as 14 sectors, Enrekang as 12 sectors, Sidrap as 10 sectors, then in Barru as 9 sectors and Parepare by 4 sectors. The detailed compilation of sectoral Klassen

Typology analysis approach for the 5 districts/municipalities in Ajatappareng Region is shown in Table 1 below.

Table 1. Results of Sectoral Klassen Typology Approach in Ajatappareng Region Period 2011-2015

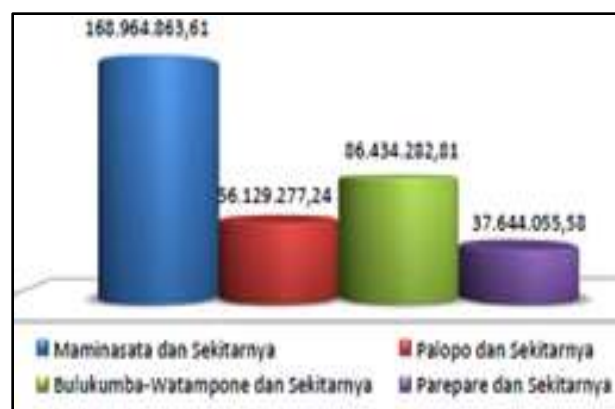
Districts/ Municipalities	Quadrant			
	Leading Sector (I)	Potential Sector (II)	Growing Sector (III)	Lagging Sector (IV)
Sidrap		6	1	10
Pinrang	1	1	1	14
Enrekang		4	1	12
Barru		6	2	9
Parepare	1		12	4
Total Amount	2	17	17	49

### Analysis of The Regional Klassen Typology Approach

Based on the classification Klassen Typology with a regional approach in the Ajatappareng Region, indicated that growth rates and per capita income are still lower than the average area in South Sulawesi during the analysis period (to be in quadrant IV). Can also be seen from the results of the analysis of sectoral approaches in Table 1 above, which shows that the average economic sector should have a role in regional economic growth turns out still belong to the growing and relatively backward/lagging sectors. From these data Ajatappareng Region is an area with the lowest regional income among other leading areas in South Sulawesi province.

The results of the Regional Klassen Typology Approach Analysis classifies the overall County and City located in the Ajatappareng Region as lagging regions in South Sulawesi province. This suggests that these regions still have growth rates and per capita incomes are below the average of all regions in the province of South Sulawesi. This means that the level of prosperity of the community and the level of economic growth in these areas is still relatively low (Figure 5).

Figure 5. GRDP at Current Market Prices By Leading Region Division in South Sulawesi Province in 2015 (Million)



But this does not mean that these areas will not be developed in the future. An area that has a relatively low level of prosperity that can catch up with the preparation of development planning appropriate programs and focused and run effectively and efficiently under the constraints of limited budgets and resources that can be used.

In the determination of strategies and development policies Sjafrizal (2016) revealed that when the economic growth in the region became the main target of development, the priority should be given to leading sectors. However, when equitable regional development which is the ultimate goal, the priority should be given to the economic sectors that are still in a state left.

In this case the district/city located in the Ajatappareng Region in determining the direction of development strategies should be directed in terms of equitable regional development because they belong to the lagging regions in the province of South Sulawesi. Thus the sectors that fall within the lagging popularity Klassen Typology analysis are expected to get their attention and efforts to increase employment through of labor-based technology.

## **CONCLUDING**

This research seeks to analyze and provide solutions to reduce the degree of inequality in terms of distribution of economic growth and increased income among the five districts/ municipalities in Ajatappareng Region, and providing advice and policy strategy also.

The results showed that by Sectoral Klassen Typology Approach, the economic sectors included in Quadrant I that become the leading sectors in districts/cities in Ajatappareng Region is Procurement Electricity and Gas sector, contained in Pinrang and Parepare. While Klassen Typology analysis through a Regional Approach, classifying the district/city in the Ajatappareng Region included in the relatively disadvantaged areas (Relatively Backward Region) so they have to get the attention and efforts to increase employment through of labor-based technology. Based on these results obtained records that need to create new growth centers in the district/city in Ajatappareng Region, so as to increase integration and interconnectivity throughout the region resulting in equitable development.

Besides, it is also necessary to identify as well as to the areas that have the potential of leading economy so the government can more wisely in determining the development priorities, so as to change the position of the district/city entered into the better or minimize the presence of the relatively backward regions. Next it is necessary to revitalize all sectors in each district/city in the Ajatappareng Region, and spur increased productivity and professionalism in managing the potential sectors in order to have competitive and comparative advantages to increase local revenue. For investors who wish to invest in the county and city in the

Ajatappareng Region, this study can be used as a reference in the sectors attention to potential to be developed as well as the development priorities of each sector in each district/city.

## REFERENCES

- Central Bureau of Statistics Indonesia, 2016. Gross Domestic Product of Regency/City in Indonesia 2011-2015. Jakarta: published by the Central Bureau of Statistics.
- Central Bureau of Statistics South Sulawesi, 2016. Gross Regional Domestic Product of Districts/Cities of South Sulawesi 2011-2015. Makassar: published by Central Bureau of Statistics of South Sulawesi Province
- Central Bureau of Statistics South Sulawesi, 2016. Human Development Index of Barru Regency Year 2013-2015.
- Central Bureau of Statistics Sidrap, 2016. Regional Statistics Sidrap District 2016. Published by the Central Bureau of Statistics Sidrap.
- Central Bureau of Statistics Sidrap, 2016. Gross Regional Domestic Product by Field of Business District Sidrap 2011-2015. Published by the Central Bureau of Statistics Sidrap.
- Central Bureau of Statistics Sidrap, 2016. District Sidrap In Figures. Published by the Central Bureau of Statistics Sidrap.
- Central Bureau of Statistics Pinrang, 2016. Gross Regional Domestic Product by Pinrang District Business Field 2011-2015. Published by the Central Bureau of Statistics Pinrang.
- Central Bureau of Statistics Pinrang, 2016. Regional Statistics Pinrang District 2016. Published by the Central Bureau of Statistics Pinrang.
- Central Bureau of Statistics Pinrang, 2016. Pinrang Dalam Dalam District. Published by the Central Bureau of Statistics Pinrang.
- Central Bureau of Statistics Enrekang, 2016. Regional Statistics Enrekang Regency 2015. Published by the Central Bureau of Statistics Enrekang.
- Central Bureau of Statistics Enrekang, 2016. Enrekang District In Figures. Published by the Central Bureau of Statistics Enrekang.
- Central Bureau of Statistics Enrekang, 2016. Gross Regional Domestic Product by Enrekang District Business Field 2011-2015. Published by the Central Bureau of Statistics Enrekang.
- Barru Central Agency, 2016. Gross Regional Domestic Product of Barru Regency 2015. Published by Central Bureau of Statistics.
- Central Bureau of Statistics Barru, 2016. Regional Statistics of Barru Regency 2016. Published by Central Bureau of Statistics.
- Central Bureau of Statistics, 2016. Barru Regency In Figures. Published by Central Bureau of Statistics.
- Central Bureau of Statistics Barru, 2016. Human Development Index of Barru Regency in 2014-2015.
- Central Bureau of Statistics Parepare, 2016. Kota Parepare In Figures. Published by Central Bureau of Statistics Parepare.
- Central Bureau of Statistics Parepare, 2016. Gross Regional Domestic Product by Parepare City Business Field 2011-2015. Published by Central Bureau of Statistics Parepare.
- Central Bureau of Statistics Parepare, 2016. Statistics of the City of Parepare. Published by Central Bureau of Statistics Parepare.
- Erawati, Ni Komang. & Yasa, I Nyoman Mahendra. 2012. Analysis of Economic Growth Patterns and Potential Sectors of Kalungkung Regency. E-Journal of Development Economics, Udayana University (Unud), Bali, Indonesia.
- Kusnet, Simon. 1966. Modern Economic Growth. Yale University Press, New Haven. In
- Jhingan, ML: Translator D. Guritno (ed). 2013. Economic Development and Planning. Jakarta: Rajawali Pers.
- Noviana, Devi Nurita, 2014. Economic And Inequality Rate of Income Among Regencies / Municipal In Province of Special Region of Yogyakarta Year 2003-2012. Thesis Undergraduate Program Diponegoro University Semarang.
- Nugroho, Purwo. 2014. Economic Growth Analysis and inequality level between sub-districts in Demak District 2008-2010. Thesis Undergraduate Program, Diponegoro University, Semarang.

- Sjafrizal, 2016. Regional Development Planning in the Autonomy Era. Jakarta: Rajawali Pers.
- Sugiyono. 2010. Statistics For Research. Bandung: Publisher Alfabeta Bandung.
- Sukirno, Sadono. 2006. Macro Economic Theory of Introduction. Jakarta: PT Raja Grafindo Persada.
- Sukirno, Sadono. 2002. Introduction to Macroeconomics / second edition. Jakarta: PT Raja Grafindo Persada.
- Tarigan, Robinson. 2005. Regional Economics: Theory and Applications. Jakarta: Earth Literacy.
- Todaro, Michael. P. & Smith, Stephen C, 2006. Economic Development / Ninth Edition. Published by Arrangement with Pearson education Limited, united kingdom. In Haris munandar (trans), Devri Barnadi, Suryadi Saat, Wibi Harmadi (Ed). 2006 Economic Development / Ninth Edition, volume 1. Erlangga Publishers
- Utama, Putra Fajar, 2010. Analysis of Economic Growth and Level of Inequality In Regency / City Which Joined In Kedungsepur Area Year 2004-2008. Thesis Undergraduate Program Diponegoro University Semarang.
- , Law no. 25 of 2004 on the National Development Planning System.
- , Regional Regulation of South Sulawesi Province Number 9 Year 2009 Concerning Spatial Plan of South Sulawesi Province Year 2009-2029.