

**ANALYSIS OF POTENTIAL ECONOMIC AND LEADING SECTOR IN
DETERMINING REGIONAL DEVELOPMENT PLANNING
(Case Study of Lebak Regency 2013-2017)**

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ABSTRACT

The purpose of this research is to figure out the leading sector in Lebak Regency. GRDP (Gross Regional Domestic Product) of Lebak Regency based on constant price in 2010 and GRDP of Banten Province based on constant price in 2010 in the period of 2013-2017 is the analysis that used in this research. The methods that are used, namely: Growth Ratio Model (MRP) Analysis, Shift-Share Analysis, Location Quotient (LQ) Analysis, Overlay Analysis, and Klassen Typology Analysis. The sector that is classified in leading sector are Agriculture, Forestry, and Fisheries sector, Mining and Quarrying sector, Large and Retail Trade, Automobile and Motorcycle Repair sector, Provision and Accommodation and Meals sector, Mandatory Government, Defence, and Social Security Administration sector, Educational Services sector, Other Services sector.

Keywords: GRDP, MRP, Shift-Share, LQ, Overlay, Klassen Typology

A. INTRODUCTION

Economic development is one of the concerns that faced by the government of Indonesia. It makes economic development becomes a tool to major advancement to the region. Sukirno conveyed that economic growth and economic development have a different definition (Sukirno, 1996). Economic growth is the process of increasing output per capita continuously in the long run, and this economic growth is one indicator of a success development. Thus the higher economic growth will increase the welfare of the community. While economic development is a process of change towards conscious and planned improvements to improve people's lives. As the times progressed, economic development began to be interpreted as an effort to increase or maintain per capita

income while still showing population growth. Professor Meier explained that economic development is a process of increasing real per capita income over a long period of time. Therefore economic development requires all parties to participate in order to achieve successful economic development in the long term (Adisasmita, 2005).

One indicator to look at people's welfare from the material aspect is through its economic growth rate (Nugraha & Basuki, 2007). Economic growth is also one of the targets in the process of economic development.

Even a country's economic development can be said to increase by only looking at its economic growth. If economic growth increases every year, then economic development also increases (Dhyatmika, 2013).

One of the efforts of the central government in encouraging the acceleration of economic growth in the regions is through legislation, it is Law No. 32 of 2004 Article 1 Paragraph about regional autonomy (Kuncoro, 2013). It said that regional autonomy is the granting of rights, authorities and obligations to the regions to regulate and manage their own affairs and the importance of the local community in accordance with the laws and regulations. This aims to accelerate the realization of public welfare through improving services, empowerment, and community participation and increasing regional competitiveness by taking into account the principles of democracy, equity, justice, privileges and the specificity of an area within the political system of Republic of Indonesia. Regional autonomy also encourages cooperation between one region and another. Regional autonomy allows more developed regions to help weak surrounding areas (Mangun, 2007).

Problems that usually occur in regions that have a weak economic level is in developing the potential of local resources in the development of the economy that is not optimal yet, so that the process of economic development is hampered. In fact, if we want to achieve a better economic change, each region must know at least the potential of its resources and be able to optimize these resources (Ministry of Village, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia, 2010).

B. LITERATURE REVIEW

1. Economic Development and Economic Growth

The development in developing countries is emphasized more on economic development, this is due to economic backwardness. Development in the economic field can support the achievement of goals or encourage changes or renewal of other areas. Jhingan states the main purpose of economic development is to implement capital on a scale sufficient to increase productivity in agriculture, mining, plantations and industry. Capital is also needed to establish schools, hospitals, highways, railroads and so on (Jhingan, 1992).

An economy experienced growth and development if the level of economic activity increases or is higher compared to the previous year. In other words, economic development occurs if the amount of goods and services physically produced increases in the following year. Indicators of the success of a region's economic development can be demonstrated by economic growth. Economic growth is the overall growth of people's income as a reflection of the increase in all value added created in a region.

2. Regional Economic Development

Regional economic development is a process whereby local governments and communities manage existing resources and form a partnership pattern between the government and the private sector to create new jobs and stimulate the development of economic activities in the region (Arsyad, 1999).

The main problem in regional development lies in the emphasis on development policies based on the peculiarities of the area concerned by using the potential of human resources, institutions, and physical resources in the regions. The orientation leads to initiatives originating from the region in the development process to create new employment opportunities and stimulate activities.

In essence, the economic development of a region is the implementation of national development in certain regions that are adjusted to the regional physical, socio-economic capabilities and comply with certain regulations.

3. Regional Economic Growth

Regional theories of economic growth analyse a region as an open economic system that deals with other regions through the flow of factors of production and commodity exchange. Development in an area will affect the growth of other regions in the form of sector demand for other regions that will encourage the development of the region on an economic development from other regions will reduce the level of economic activity in an area and interrelation.

Economic growth can be assessed as the impact of government policy, especially in the economic field. Economic growth is a growth rate that is formed from various types of economic sectors that indirectly illustrate the level of growth

that occurs and as an important indicator for the region to evaluate the success of development.

4. The Role of the Government in Regional Development

Local governments have an important role in the progress and welfare of economic development in the region. There are four roles that local governments can take in the process of regional economic development, namely as entrepreneurs, coordinators, facilitators, and stimulators for the incipience of regional development initiatives (Arsyad, 1999).

5. Regional Autonomy

Regional autonomy has the understanding that the authority to regulate and administer regional households is inherent in both unitary and federal states. The authority of the regional government in regulating its household in all fields except for a few things, namely foreign relations, court, monetary and finance and defence and security.

In law no. 32 of 2004 concerning regional government and law No.33 of 2004 concerning the financial balance between the central government and regional governments there is a new thing in the administration of local government. Secondly, the law has signalled a greater delegation of authority from the central government to regional governments.

C. RESEARCH METHOD AND RESULT

1. Growth Ratio Model (MRP)¹ Analysis

Yusuf states that this analytical method is used in describing a potential economic activity or sector based on the growth criteria of the economic structure of the region, both external and internal (Yusuf, 1999).

This MRP method is derived from Different Shift and Proportionality Shift which is the initial main component in the Shift and Share analysis. Mathematically, Differential Shift and Proportional Shift can be written as follows:

Different Shift

$$D_{ij} = \left[\frac{\Delta E_{ij}}{E_{ij}(t)} - \frac{EIR}{EIR(t)} \right] E_{ij}(t) \dots \dots \dots (1)$$

¹ MRP is the abbreviation of *Model Rasio Pertumbuhan* (Indonesian term)

Proportional Shift

$$P_{ij} = \left[\frac{\Delta EIR}{EIR(t)} - \frac{\Delta ER}{ER(t)} \right] E_{ij}(t) \dots \dots \dots (2)$$

From the equation above, we can obtain the formula from the following calculation:

$$\Delta EIR = EIR(t + n) - EIR(t) \dots \dots \dots (3)$$

$$\Delta ER = ER(t + n) - ER(t) \dots \dots \dots (4)$$

In which:

- ΔE_{ij} : The change of income of activity i in study area at t time period
- ΔEIR : The change of income of activity i in the reference area
- ΔER : The change of PDRB in the reference area
- E_{ij} : Income activity i in the study area
- EIR : Income activity i in the reference area
- ER : GDRP in the reference area
- $t + n$: Years between two periods

The MRP analysis approach is divided into two ratios: growth ratio of the reference area (RP_R) and the growth ratio of the study area (RP_S).

1. Growth Ratio of the Reference Area (RP_R)

Growth Ratio of the Reference Area (RP_R) is the ratio between the growth rates of income activity i in the reference area with the total growth rate of GDRP of reference activity.

$$RP_R = \left[\frac{\Delta E_{iR}/E_{iR}(t)}{\Delta ER/ER(t)} \right] \dots \dots \dots (5)$$

In which:

- ΔE_{iR} : The change of revenue of activity i in the reference area
- $E_{iR}(t)$: Revenue activity i in the beginning of research period in the reference area
- ΔER : The change of GRDP in the reference area
- $ER(t)$: GDRP at the beginning of the research in the reference area

When the value of $RP_R > 1$ or a positive (+), it shows that the particular sector's growth in the reference area is higher than the growth of GDRP in the total of reference area.

When the value of $RP_R < 1$ or a negative (-), it shows that the growth of a particular sector in the reference area is lower than the growth of GDRP in the total of reference area.

2. Growth Ratio of the Study Area (RP_S)

Growth Ratio of the Study (RP_R) is the ratio between the growth rates of activity i in the study area with the growth rate activity i in the reference area.

$$RP_S = \left[\frac{\Delta E_{ij}/E_{ij}(t)}{\Delta E_{iR}/E_{iR}(t)} \right] \dots \dots \dots (6)$$

In which:

ΔE_{ij} : The change of revenue of activity i in the study area

$E_{ij}(t)$: Revenue activity i in the beginning of research period in the study area

ΔE_{iR} : The change of revenue of activity i in the reference area

$E_{iR}(t)$: Revenue activity i in the beginning of research period in the reference area

When the value of $RP_S > 1$ or a positive (+), it shows that the growth of the study area sector is greater than the growth of reference area sector.

When the value of $RP_S < 1$ or a negative (-), it shows that the growth of the study area sector is lower than the growth of reference area sector.

Table 1
The Result of MRP Calculation of Lebak Regency 2013-2017

Sector	RPR		RPS	
	Real	Nominal	Real	Nominal
Agriculture, Forestry, and Fisheries	0.91	-	0.91	-
Mining and Quarrying	0.49	-	0.09	-
Processing Industry	0.56	-	0.44	-
Procurement of Electricity and Gas	0.10	-	0.21	-
Water Supply, Waste Management, Waste, and Recycling	1.18	+	0.68	-
Contractions	1.49	+	1.94	+
Large and Retail Trade, Automobile and Motorcycle Repair	0.95	-	0.91	-
Transportation and Warehousing	1.26	+	0.94	-

Provision of Accommodation and Meals	1.39	+	1.07	+
Information and Communication	1.89	+	0.74	-
Financial Services and Insurance	1.38	+	1.00	+
Real Estate	1.40	+	0.88	-
Company Services	1.42	+	0.76	-
Mandatory Government, Defense, and Social Security Administration	1.19	+	1.24	+
Educational Services	1.27	+	1.07	+
Health Services and Social Activities	1.21	+	1.39	+
Other Services	1.32	+	1.07	+

Author Estimation, Data from Central Bureau of Statistics (BPS) of Lebak Regency 2018

There are some sectors that have positive value at both RPR and RPS side. They are contractions sector, provision of accommodation and meals sector, financial services and insurance sector, mandatory government, defense, and social security administration sector, educational services sector, health services and social activities sector, and the last other services sector. It means that all of sectors that mentioned above are the potential sectors, both in province and regency levels. In other words, they have a prominent growth compare to other sectors.

The sectors that have positive (+) result in RPR and negative (-) in RPS are Water Supply, Waste Management, Waste, and Recycling, Transportation and Warehousing, Information and Communication, Real Estate, and Company Services. It means that in the period of 2013-2017 these five sectors have remarkable growth at the province level but at the regency level are not outstanding yet.

The sector that has both negative (-) value at RPR and RPS are Agriculture, Forestry, and Fisheries, Mining and Quarrying, Processing Industry, Procurement of Electricity and Gas, and Large and Retail Trade, Automobile, and Motorcycle Repair. This means both in province and regency level, sectors mentioned above still have low growth.

2. Shift-Share Analysis

Shift-Share Analysis is a technique that is used to analyse the changes in economic structure in the certain area with the economy in national scale. The purpose of the Shift-Share Analysis is to specify the economic work productivity in an area by comparing it to the economy in a larger scale, regionally and nationally (Arsyad, 1999).

Equations and components in the shift share analysis are as follows:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij} \dots \dots \dots (7)$$

In this research, the variables used are:

$$D_{ij} = E^*_{ij} - E_{ij} \dots \dots \dots (8)$$

$$N_{ij} = E_{ij} \cdot r_n \dots \dots \dots (9)$$

$$M_{ij} = E_{ij} (r_{in} - r_n) \dots \dots \dots (10)$$

$$C_{ij} = E_{ij} (r_{ij} - r_n) \dots \dots \dots (11)$$

In this case the value of r_{ij} , r_{in} , and r_n are relative and they represent the regency growth rate and province growth rate which are defined as follows:

$$r_{ij} = \frac{(E^*_{ij} - E_{ij})}{E_{ij}} \dots \dots \dots (12)$$

$$r_{in} = \frac{(E^*_{in} - E_{in})}{E_{in}} \dots \dots \dots (13)$$

$$r_n = \frac{(E^*_{n} - E_n)}{E_n} \dots \dots \dots (14)$$

In which:

- E_{ij} : Income of sector i in j area (regency)
- E_{in} : Income of sector i in n area (province)
- E_n : Revenue of n area (region)
- E^*_{ij} : Revenue of final year
- R_{ij} : The growth year of sector i in j area (regency)
- R_{in} : The growth year of sector i in n area (province)
- R_n : Income growth rate of n area (province)

With the result that Shift Share equation for sector i in j area according to (Soepono, 1993) as follow:

$$D_{ij} = E_{ij} \cdot r_n + E_{ij} (r_{in} - r_n) + E_{ij} (r_{ij} - r_{in}) \dots \dots \dots (15)$$

In which:

- D_{ij} : The change of variable output of sector i in j area
- N_{ij} : National economic growth
- M_{ij} : The mix of sector i industry in j area
- C_{ij} : The competitive advantage of sector i in j area
- E_{ij} : The income of sector i in j area

Table 5.2

Shift-Share Calculation Results of Lebak Regency 2013-2017

Sector	2015				2016				2017			
	Nij	Mij	Cij	Dij	Nij	Mij	Cij	Dij	Nij	Mij	Cij	Dij
1.	241,694.49	51,871.71	75,304.62	368,870.82	249,162.97	64,837.85	-14,239.96	299,760.86	280,944.40	-78,246.03	8,583.80	211,282.17
2.	62,507.22	-20,131.80	-10,008.79	32,366.62	63,238.55	-22,236.12	549.50	41,551.93	69,347.95	-77,811.21	25,499.28	17,036.02
3.	96,736.59	-33,468.82	-118,331.30	-55,063.53	96,273.03	-39,966.92	-23,802.46	32,503.64	109,480.98	-38,534.72	27,902.43	98,848.69
4.	614.00	-771.68	772.85	615.17	720.33	-1,286.41	3,292.27	2,726.19	803.91	-732.80	379.18	450.29
5.	528.89	-22.80	38.29	544.38	531.03	137.54	-398.53	270.04	614.49	172.95	-33.70	753.74
6.	60,249.93	28,519.72	141,857.32	230,626.97	64,861.85	12,615.04	46,612.42	124,089.31	82,363.48	33,526.14	135,388.35	251,277.98
7.	123,342.77	-10,898.58	-49,246.85	63,197.34	124,650.54	-33,647.01	-11,748.96	79,254.56	145,294.08	11,127.38	41,629.40	198,050.86
8.	55,951.65	12,153.35	-32,205.47	35,899.53	57,168.31	25,516.00	-33,997.91	48,686.40	66,034.88	33,133.84	-20,401.23	78,767.49
9.	43,123.46	8,146.92	7,433.85	58,704.24	45,331.83	19,664.66	-517.61	64,478.87	53,168.19	23,944.35	1,608.37	78,720.92
10.	7,378.88	5,162.78	-6,770.35	5,771.31	7,506.77	3,927.77	-5,683.16	5,751.39	8,773.25	4,166.67	-540.59	12,399.33
11.	15,613.16	8,659.02	-2,113.03	22,159.15	16,942.78	28,518.17	-10,220.31	35,240.64	18,991.70	-6,316.40	-529.08	12,146.22
12.	63,925.20	21,129.59	-25,727.08	59,327.71	66,586.43	31,797.46	-16,028.86	82,355.02	78,243.40	30,298.87	10,090.76	118,633.03
13.	2,831.50	1,258.62	-1,660.19	2,429.93	2,914.20	1,186.66	-1,197.82	2,903.03	3,356.87	1,300.75	-827.22	3,830.39
14.	44,571.01	9,487.13	22,868.57	76,926.71	47,307.17	16,358.62	12,949.67	76,615.46	54,028.81	-10,697.11	9,730.67	53,062.36
15.	50,622.55	12,131.18	2,832.71	65,586.44	52,986.10	13,651.64	4,088.69	70,726.43	61,354.58	18,424.55	-3,771.27	76,007.86
16.	9,583.70	-400.85	6,783.46	15,966.30	10,213.16	4,152.33	3,023.97	17,389.45	12,245.93	4,800.17	6,294.92	23,342.02
17.	22,998.85	4,838.06	-1,220.42	26,616.48	23,928.61	9,522.23	-4,413.52	29,037.33	27,638.46	11,768.87	-6,465.67	32,941.66
GRDP	902,273.85	97,663.54	10,608.20	1,010,545.59	930,323.63	134,749.50	-51,732.57	1,013,340.57	1,027,686.37	-39,673.74	234,538.40	1,267,551.03

Author Estimation, Data from Central Bureau of Statistics (BPS) of Lebak Regency 2018

Description: Nij is a National Growing Component, Mij is an Industrial Mix Component, Cij is a Competitive Advantage Component, Dij is a Regional Growth Component

- | | |
|---|---|
| 1. Agriculture, Forestry, and Fisheries | 10. Information and Communication |
| 2. Mining and Quarrying | 11. Financial Services and Insurance |
| 3. Processing Industry | 12. Real Estate |
| 4. Procurement of Electricity and Gas | 13. Company Services |
| 5. Water Supply, Waste Management, Waste, and Recycling | 14. Mandatory Government, Defense, and Social Security Administration |
| 6. Construction | 15. Educational Services |
| 7. Large and Retail Trade, Automobile and Motorcycle Repair | 16. Health Services and Social Activities |
| 8. Transportation and Warehousing | 17. Other Services |
| 9. Provision of Accommodation and Meals | |

Sector that has competitive advantage are mining and quarrying, processing industry, large and retail trade, automobile and motorcycle repair, information and communication, real estate, company services.

3. Location Quotient Analysis

It is a technique used to expand the Shift Share Analysis or to measure the industrial activity in an area by comparing its role in a regional economy with the role of similar activities or industries in the regional or national economy (Arsyad, 1999). This technique can help in determining the economic export capacity in an area and also the degree of self-sufficiency of a sector. The basis of the LQ (Location Quotient) theory is the existence of a basic economic theory that has the premise that the existence of a base industry will produce goods and services for the market in the area or markets that are outside the area, with exports to other regions will have a positive impact on the region's income.

Formula for calculating LQ (Location Quotient) is

$$LQ = \frac{vi/vt}{Vi/Vt} \frac{vi/Vi}{vt/vt} \dots\dots\dots(16)$$

In which:

- LQ : Location Quotient Coefficient
- vi : The income of industry in an area
- vt : The total income of an area
- Vi : The income of similar industry in a regional or national level
- Vt : National or regional income

From the formula above there are 3 categories of Location Quotient (LQ) calculation results in the regional economy, namely:

If the LQ value is > 1, then the sector in the study area is more specialized than the reference area. Thus, the sector in the regional economy in the study area has a comparative advantage and can be categorized as a base sector.

If the LQ value is < 1, then the sector in the study area is less specialized than the reference area. The sector belongs to the category of non-base sectors.

If the value of LQ = 1, then the sector in the study area and also in the reference area has an enhancement.

Table 3
The Result of Location Quotient's Calculation of Lebak Regency 2013-2017

Sector	Location Quotient					LQ Average
	2013	2014	2015	2016	2017	
Agriculture, Forestry, and Fisheries	4.75	4.43	4.73	4.70	4.66	4.65
Mining and Quarrying	9.52	8.84	9.22	9.19	9.30	9.21
Processing Industry	0.32	0.30	0.29	0.29	0.29	0.30
Procurement of Electricity and Gas	0.05	0.05	0.06	0.07	0.07	0.06
Water Supply, Waste Management, Waste, and Recycling	0.66	0.59	0.63	0.60	0.59	0.61
Contractions	0.58	0.61	0.72	0.74	0.80	0.69
Large and Retail Trade, Automobile and Motorcycle Repair	1.05	0.99	1.02	1.01	1.02	1.02
Transportation and Warehousing	0.97	0.96	0.98	0.95	0.92	0.96
Provision of Accommodation and Meals	2.04	1.95	2.07	2.06	2.05	2.03
Information and Communication	0.16	0.15	0.15	0.15	0.14	0.15
Financial Services and Insurance	0.63	0.60	0.63	0.61	0.60	0.62
Real Estate	0.92	0.86	0.88	0.87	0.87	0.88
Company Services	0.34	0.31	0.32	0.31	0.31	0.32
Mandatory Government, Defense, and Social Security Administration	2.77	2.66	2.87	2.89	2.90	2.82
Educational Services	1.92	1.85	1.95	1.95	1.92	1.92
Health Services and Social Activities	0.88	0.85	0.93	0.94	0.95	0.91
Other Services	1.74	1.72	1.80	1.78	1.74	1.76

Author Estimation, Data from Central Bureau of Statistics (BPS) of Lebak Regency 2018

There are seven economic sectors that have LQ value > 1, they are agriculture, forestry, and fisheries sector, mining and quarrying sector, large and retail trade, automobile and motorcycle repair sector, provision of accommodation and meals sector, mandatory government, defense, and social security sector, educational services sector, and other services sector. This shows that these sectors are able to fulfil the needs of the Lebak Regency and tend to be able to export to areas outside Lebak Regency.

Processing industry sector, procurement of electricity and water sector, water supply, waste management, waste, and recycling sector, contractions sector, transportation and warehousing sector, information and communication sector, financial services and insurance sector, real estate sector, company services sector, and health services and social activities sector have a LQ value < 1, this means that these sectors are non-base sectors and tend to import from outside the Lebak Regency.

4. Overlay Analysis

Overlay analysis is a useful method for determining potential economic sectors based on growth and contribution criteria by combining the results of the Growth Ratio Method (MRP) and Location Quotient (LQ). This Overlay Analysis has 4 assessments, namely:

1. When the growth is positive (+) and the contribution also positive (+), which means that an activity is very dominant both in terms of growth and contributions.
2. When the growth is positive (+) and the contribution is negative (-), which means that the activity is has a dominant growth but in terms of contribution is small. It is recommended for this activity to increase their contribution to become a dominant activity.
3. When the growth is negative (-) and the contribution is positive (+), which means that an activity whose the growth is small but in terms of its contribution includes large. From this it can be seen that activities are experiencing a decline.
4. When the growth is negative (-) and the contribution is also negative (-), which means that an activity is not potential both in terms of growth and in terms of contribution.

Table 4

The Result of Overlay Analysis's Calculation of Lebak Regency 2013-2017

Sector	MRP (RPS)		LQ		Overlay Analysis
	Real	Nominal	Real	Nominal	
Agriculture, Forestry, and Fisheries	0.91	-	4.65	+	(-,+)
Mining and Quarrying	0.09	-	9.21	+	(-,+)
Processing Industry	0.44	-	0.30	-	(-,-)
Procurement of Electricity and Gas	0.21	-	0.06	-	(-,-)
Water Supply, Waste Management, Waste, and Recycling	0.68	-	0.61	-	(-,-)
Contractions	1.94	+	0.69	-	(+,-)
Large and Retail Trade, Automobile and Motorcycle Repair	0.91	-	1.02	+	(-,+)
Transportation and Warehousing	0.94	-	0.96	-	(-,-)
Provision of Accommodation and Meals	1.07	+	2.03	+	(+,+)
Information and Communication	0.74	-	0.15	-	(-,-)
Financial Services and Insurance	1.00	+	0.62	-	(+,-)

Real Estate	0.88	-	0.88	-	(-, -)
Company Services	0.76	-	0.32	-	(-, -)
Mandatory Government, Defense, and Social Security Administration	1.24	+	2.82	+	(+, +)
Educational Services	1.07	+	1.92	+	(+, +)
Health Services and Social Activities	1.39	+	0.91	-	(+, -)
Other Services	1.07	+	1.76	+	(+, +)

Author Estimation, Data from Central Bureau of Statistics (BPS) of Lebak Regency 2018

The sectors that have great growth and contribution are provision of accommodation and sectors, mandatory government, defense, and social security administration sectors, educational services sectors, and other services sectors. These results mean that the four sectors are the most dominant sectors seen from the values obtained that the growth and contribution are very large towards the formation of GRDP and development in Lebak Regency.

Construction sector, financial services and insurance sectors, and health services and social activities, this result defines an economic activity with a dominant growth but its contribution is small. Therefore it is necessary to increase in these sectors and be developed to become the dominant sector on both sides.

Agriculture, forestry, and fisheries sectors, mining and quarrying sectors, and large and retail trade, automobile and motorcycle repair sectors, this explains that the sector has small growth and has a large contribution. Therefore, adequate employment is needed to increase economic growth.

Processing industry sector, procurement of electricity and gas sector, water supply, waste management, waste, and recycling sectors, transportation and warehousing sectors, information and communication sectors, real estate sector, and company services sector, these results mean that these sectors are sectors that are not potential in growth and their contribution to the formation of GRDP and regional development of Lebak Regency.

5. Klassen Typology Analysis

Klassen Typology Analysis is used to find out an overview of the growth pattern and structure of each economic sector. An overview of the pattern and structure of regional growth can be used to estimate the prospects for regional economic growth in the future. In addition, it can also be used as a consideration in determining

regional development policies. According to the regional typology, the area is divided into four classifications, namely:

Rapid growth sector

It is regions that have a higher economic growth rate and per capita income than the regional average.

Retarded growth

It is regions that have higher per capita income, but their economic growth rates are lower than average.

Growing sector

It is areas that has higher growth rate, but the rate of per capita is lower than the average.

Relatively backward sector

It is an area that has a low level of economic growth and per capita income from the reference area.

Table 5
Classification of GRDP Sector of Lebak Regency 2013-2017

Proportion Growth	$\frac{x_1}{x} \geq 1$	$\frac{x_1}{x} \leq 1$
$\frac{\Delta X_1}{\Delta X} \geq 1$	<p><u>Rapid growth sector</u> Agriculture, Forestry, and Fisheries (4.70 and 1.00), Provision and Accommodation and Meals (2.06 and 1.08), Mandatory Government, Defense, and Social Security Administration (2.85 and 1.26), Educational Services (1.94 and 1.08), and Other Services (1.78 and 1.08)</p>	<p><u>Growing sector</u> Mining and Quarrying (9.31 and 0.95) and Large and Retail Trade, Automobile and Motorcycle Repair (1.03 and 0.94)</p>
$\frac{\Delta X_1}{\Delta X} \leq 1$	<p><u>Retarded sector</u> Procurement of Electricity and Gas (0.06 and 14.99), Contractions (0.70 and 2.14), and Health Services and Social Activities (0.92 and 1.40)</p>	<p><u>Relatively backward sector</u> Processing Industry (0.30 and 0.43), Water Supply, Waste Management, Waste, and Recycling (0.62 and 0.65), Transportation and Warehousing (0.97 and 0.89), Information and Communication (0.15 and 0.79), Financial Services and Insurance (0.62 and 0.92), Real Estate (0.89 and 0.87), and Company Services (0.32 and 0.75)</p>

Author Estimation, Data from Central Bureau of Statistics (BPS) of Lebak Regency 2018

6. SWOT Analysis

SWOT analysis is used to identify systematic nature and can also be used to harmonize several factors from the internal and external environmental factors and can be used as a catalyst in a strategic planning process. The SWOT analysis is carried out by focusing on two things, among others, opportunities and threats and for identifying internal strengths and weaknesses. Perce and Robinson state that this analysis underlies the assumption that an effective strategy can maximize strengths and opportunities and can minimize weaknesses and threats (Ghufron, 2008).

Some elements of SWOT are S (strength), which means referring to compelling competencies and other competencies. W (weakness) is an obstacle that limits some choices in developing strategies, namely O (opportunity), namely to provide favourable conditions or a barrier-limiting opportunity and T (threat), which is related to conditions that can hinder or various obstacles to achieving objectives. This matrix can produce four cells that might be alternative strategies, namely S-O strategy, W-O strategy, W-T strategy and S-T strategy.

There are eight stages in forming a SWOT matrix, namely:

- a. Make a list of key internal strengths in the region
- b. Make a list of key internal weaknesses in the region
- c. Make a list of regional external opportunities
- d. Make a list of regional external threats
- e. Adjust the various internal forces as opportunities and record the results in the S-O strategy cell
- f. Adjust various kinds of internal weaknesses with opportunities and record the results in the cell strategy W-O
- g. Adjust various kinds of internal strength with external threats and record the results in the S.T strategy cell
- h. Adjust various kinds of internal weaknesses with external threats and record the results in the W strategy.

Table 6
The Result of SWOT Analysis

<p align="right">Internal</p> <p align="left">External</p>	<p align="center">Strength (S)</p> <ol style="list-style-type: none"> 1. Large natural resource potential in the base sector, namely the agricultural sector 2. The strategic location of Lebak Regency. 3. <i>Pisang sale</i> (processed banana) as a economic mainstay of Lebak society 4. Having mining and quarrying sector which are the leading sectors. 	<p align="center">Weakness (W)</p> <ol style="list-style-type: none"> 1. Utilization and management of natural resources that have not been optimal. 2. Soaring fertilizer distribution. 3. Low number of jobs that are not suitable with the size of the cement factory. 4. Lack of road construction and lighting.
<p align="center">Opportunities (O)</p> <ol style="list-style-type: none"> 1. Lebak Regency is a mining and agricultural area. 2. Government support in the form of People's Business Credit (KUR) for small and medium enterprises. 3. Cooperation with other parties or private parties. 4. The need and demand for agricultural commodities, especially rice, is very high. 5. Technological developments in the base sector. 	<p align="center">S-O Strategy</p> <ol style="list-style-type: none"> 1. Increasing the potential of the superior sector by utilizing government support in the form of ease of service in the licensing process and socialization of the processing of high value raw materials (S4, O1, O5). 2. Use strategic locations to drive trade between regions in the economy of local communities. (S2, O1). 3. Increasing agricultural potential with government support in the form of fertilizer distribution and socialization of the introduction of superior food crops (S1, S3, O1, O2, O4). 4. Improve the quality of education (S2). 	<p align="center">W-O Strategy</p> <ol style="list-style-type: none"> 1. Managing natural resources optimally with assistance from the government in the form of assistance with modern tools that can facilitate work (W1, W3, O2, O5). 2. Repairing facilities and infrastructure, namely street lighting, and building new roads in collaboration with private parties (W4, O3). 3. Increasing human resources for technological developments with government assistance in the form of socialization of technological progress and competition in the era of globalization (W3, O3, O5).
<p align="center">Threats (T)</p> <ol style="list-style-type: none"> 1. Unstable security conditions. 2. Competition between regions to improve the economy. 3. Competitiveness in the era of globalization. 4. The focus in the low non-base sector is procurement of electricity and gas. 5. Disasters that often occur are floods and landslides. 	<p align="center">S-T Strategy</p> <ol style="list-style-type: none"> 1. Creating a conducive business climate with government assistance in the form of facilitating business licensing and combating extortion (S4, T1) 2. Increasing awareness in management of the base sector with socialization to the community to further improve the economy (S1, S3, T4) 	<p align="center">W-T Strategy</p> <ol style="list-style-type: none"> 1. Improve skills to the community so that the quality of human resources can compete in the era of globalization (W3, T2, T4). 2. Empowerment of human resources in the face of crop failure by improving irrigation (T5) 3. Cooperating with cooperatives in fertilizer distribution (W2)

D. CONCLUSION AND RECOMMENDATION

1. Conclusion

1. The sector that has great growth both in Lebak Regency and Banten Province are Construction sector, Provision of Accommodation and Meals sector, Financial Services and Insurance sector, Mandatory Government, Defence, and Social Security Administration sector, Educational Services sector, Health Services and Social Activities sector, and Other Services sector.
2. The sector that is included in competitive advantage based on Shift-Share Analysis are Mining and Quarrying sector, Processing Industry sector, Large and Retail Trade, Automobile and Motorcycle Repair sector, Information and Communication sector, Real Estate sector, Company Services sector.
3. The sector that is included in base sector based on LQ analysis result are Agriculture, Forestry, and Fisheries sector, Mining and Quarrying sector, Large and Retail Trade, Automobile and Motorcycle Repair sector, Provision and Accommodation and Meals sector, Mandatory Government, Defence, and Social Security Administration sector, Educational Services sector, Other Services sector.
4. The sector that has great contribution and growth in Lebak Regency based on Overlay Analysis are Provision of Accommodation and Meals sector, Mandatory Government, Defence, and Social Security Administration sector, Educational Services sector, and Other Services sector.
5. Sectors that have rapid grow for the future are agriculture, forestry, and fisheries sector, provision of accommodation and meals sector, mandatory government, defence, and social security administration sector, educational services sector, and other services sector.
6. Based on the results of the SWOT analysis, the leading sector development policy strategy that needs to be improved is to increase the pace of the regional economy by paying attention to the potential of the base sector, improving the quality of education, improving public facilities and infrastructure to improve economic competitiveness with other regions and increasing the availability of infrastructure development with regard to sustainability environment.

2. Recommendation

1. From the author, it is desirable to the government, especially the local government of Lebak Regency in an effort to increase GRDP so that it can be prioritized in developing a leading sector and also not ignoring the non-leading sector in the sense that it includes that sector as a support in carrying out activities.
2. The regional development is very necessary because this will encourage the changes of the region and lead to the progress and better condition than before. However, regional development needs careful and deep planning. In addition, the government must also pay attention to sectors that are able to encourage an increase in economic growth. The efforts that must be carried out by the local government is to recognize the region so that it can explore all the potential that exists in its area so that it can find out what sectors must continue to be encouraged and developed, without ruling out sectors that have not been optimal in its development. Because if the regional development is prioritized on potential sectors, it is hoped that the development of potential sectors can spur the development of other sectors that are not optimal yet.
3. It is expected that the government and the private sector will make potential sectors, such as Agriculture, Forestry, and Fisheries sector, Mining and Quarrying sector, Large and Retail Trade, Automobile and Motorcycle Repair sector, Provision and Accommodation and Meals sector, Mandatory Government, Defence, and Social Security Administration sector, Educational Services sector, Other Services sector as a forum for employment and emphasize contributions through the export of goods and services industry.
4. The need for socialization about the importance of knowing and studying science and technology, because in the current era is an era of advanced technology able to provide convenience for local communities in carrying out activities, by learning technology, it will open up broader horizons. In addition, the government is also expected to be able to produce qualified, competent and competitive human resources. Because to be involved to the working world it is not only required human resources in the hard skills but also human resources who have soft skills. Moreover, now is the era of AEC (Asean Economic Community), we need truly

qualified human resources to be able to compete with other regional or country of human resources.

5. For further research, a regional approach is needed to figure out which area is suitable for the development of a sector, and the research of leading sector in province level is also needed.

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