

# Analysis of Leading Sectors in East Kalimantan In 2018-2022 As a Potential for Advanced Indonesia

Maya Nur Cholida<sup>1</sup>, Firsty Ramadhona Amalia Lubis<sup>2</sup>, Agus Salim<sup>3</sup>

maya2100010057@webmail.uad.ac.id<sup>1</sup>, firsty.ramadhona@ep.uad.ac.id<sup>2</sup>, agus.salim@ep.uad.ac.id<sup>3</sup>

Universitas Ahmad Dahlan, Indonesia <sup>1,2,3</sup>

**Abstract.** An increase in the regional economy can be obtained when there is a competitive advantage in the sector in the region. The economic sector can potentially improve the economy when the financial sector is classified as a primary sector. This sector is highly competitive and has a fast growth rate. The novelty that distinguishes this research is to analyze the sector in the area that is the location of IKN development. This research aims to determine the primary economic sector, sectors with fast growth rates and high competitiveness, and sectors categorized as developed sectors in the financial sector in East Kalimantan in 2018-2022. This research applies quantitative data from the Gross Regional Domestic Product (GRDP) value of East Kalimantan and the Gross Domestic Product (GDP) value of Indonesia in 2018-2022 sourced from the Central Statistics Agency (BPS). The method used in this study uses the Location Quotient (LQ) data analysis model, Shift Share (SS), and Klessen Typology analysis. The results of this study state that there is only one primary sector in East Kalimantan, namely the Mining and Quarrying sector. Meanwhile, the sector with the fastest growth rate is the Health Services and Social Activities sector, and the dominating sector in East Kalimantan is the Mining and Quarrying sector. Thus, superior sectors in East Kalimantan can be an impetus to increase per capita income and minimize unemployment to support the realization of Advanced Indonesia.

**Keywords:** Base Sector; Location Quotient; Shift Share; Klessen; GDP.

## 1 INTRODUCTION

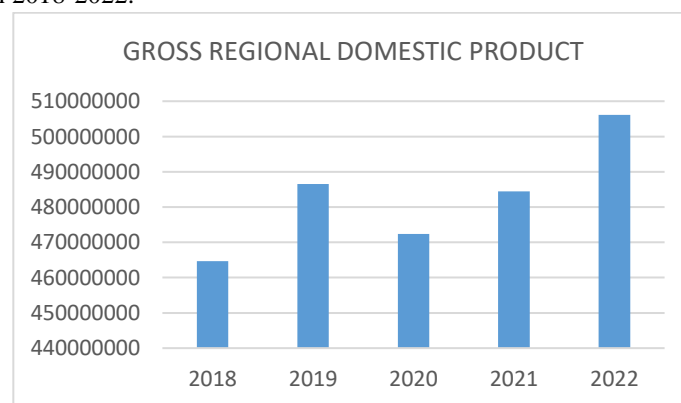
In the era of regional autonomy and accompanied by globalization, regional development has become more complex. Globalization has positive and negative effects on regional development and provides opportunities for countries to create wealth through the growth of exports and imports (Suripto et al., 2020). The existence of innovation makes a positive perspective to improve a development's performance, but globalization can trigger tighter competition between regions (Basuki & Mujiraharjo, 2017). Thus, this can be an impetus for a region to continue to improve competitiveness and maintain the superiority of the regional sector in order to achieve a level of welfare and increase economic growth (Nafisah & Sukarniati, 2015).

One of the elements that determine the growth of the regional economy is directly related to the demand for goods and services from a region. In this case, the quality of local resources processed into a product must be maintained and improved. It must maintain competition for industrial growth by looking at raw materials, land use, and the quality of labor. A higher level of local production with superior quality can generate regional wealth and create employment opportunities. Thus, it can be assumed that when a region can create a quality sector and compete with similar sectors in other regions, it has sectoral advantages and triggers an increase in GRDP (Mahrita et al., 2016).

East Kalimantan is one of the provinces in Indonesia that has the potential to significantly contribute to improving the Indonesian economy. On the other hand, East Kalimantan is currently developing the relocation of the Indonesian Capital City, which can provide opportunities to increase regional development. These opportunities can influence the development of sectors in this province. The development of the economic sector is closely related to the achievement of welfare levels. The factor of increasing population can influence the level of welfare. When the population is high, there will also be higher economic needs to achieve the welfare level.

Through the website of the Central Statistics Agency (BPS), data on the population of East Kalimantan as of 2022 was recorded at 2741.1 thousand people, while Indonesia's national population as of 2022 was 275733.8 thousand people. In this case, with a large population, it will encourage a high demand for production. In addition to meeting domestic needs, production is also carried out to meet export needs so that it can compete in the global world. Within five years, East Kalimantan Province shows fluctuating economic growth. In 2020, the GRDP value weakened from the previous year due to the COVID-19 pandemic.

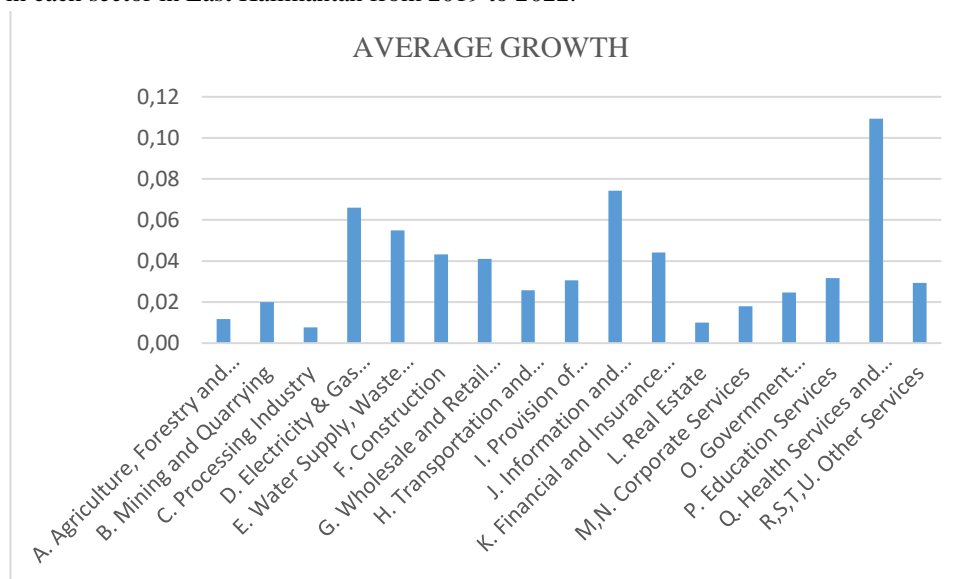
Economic growth can indicate the parameters of macroeconomic development's success, which is reflected in changes in Gross Regional Domestic Product (GRDP) (A'yun et al., 2022). Looking at the growth rate of GRDP at constant prices can show a region's economic growth. The following is data on the total value of GRDP based on constant prices 2010 East Kalimantan in 2018-2022.



**Figure 1. East Kalimantan GRDP Value at Constant Prices**

Based on the diagram above, it is evident that, in 2020, East Kalimantan Province had a GRDP value based on constant prices that decreased from 2019. However, the figure shows that the decline did not continue to occur in the following year. In 2021, the GRDP value has increased until 2022. Based on 2010 constant prices, in 2022, the GRDP value of East Kalimantan will have increased from 2021. The value of East Kalimantan GRDP in 2022 amounted to 506.16 trillion rupiah, an increase of around 21.72 trillion rupiah from 484.44 trillion rupiah in 2021. In this case, this condition states that in 2022, the economy in East Kalimantan grew by 4.48 percent. On the other hand, the Mining and Processing sector, Construction, Agriculture, Forestry, Fisheries, and Wholesale and Retail Trade Repair of Cars and Motorcycles are the sectors that dominated the economic structure in East Kalimantan in 2018-2022 (Iverson & Dervan, n.d.).

Economic growth in Indonesia is open to regional economic growth (Ardina D.R, 2020). Regional economic development can support regional economic growth and refers to the community's welfare. In this case, regional economic development can be implemented through the assistance of local governments and local communities to manage resources and form cooperation strategies or partners between the government and the private sector to create jobs and stimulate economic development in a region (Juhanis, 2012). A region's economic development will trigger the realization of economic growth targets and the achievement of income equality and minimize inequality. The following is data showing the average GRDP growth in each sector in East Kalimantan from 2019 to 2022.



**Figure 2 Average Economic Sector Growth in East Kalimantan**

Based on the data above, each sector in East Kalimantan shows average growth from 2019 to 2022, which has different average growth. The Health Services and Social Activities sector shows the highest average growth compared to other industries. The average growth of the Health Services and Social Activities sector was at 0.11 or 9.46 percent. Based on the data, the amount of East Kalimantan GRDP in the Health Services and Social Activities sector has a

figure that is reasonable compared to the Mining and Quarrying sector. Even though it has a not-too-large production, the industry has a positive number increase yearly, so it has a high GDP growth rate. On the other hand, the mining and quarrying sector has the highest production of all industries. However, the yearly production growth rate has a positive increase and trend of 3.49 percent, although not as fast as the Health Services and Social Activities sector. Comprehensive, solid, and sustainable economic integration between one sector and another is the key to achieving successful economic growth. In this case, economic growth should offer more employment opportunities and encourage labor-intensive investment (Zakiyyah et al., 2023). Therefore, the leading sectors in East Kalimantan need to be reviewed to see how much potential the industry has for economic growth in Indonesia, accompanied by the development of the Indonesian Capital Region in East Kalimantan. In this case, the authors are interested in analyzing the leading sectors in East Kalimantan which make a potential for Indonesia's Economic Growth with the title "Leading Sector Analysis as a Potential Advanced Indonesia in East Kalimantan in 2018-2022".

## **2 LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT**

In the literature review, the author uses several other authors' research similar to this research to be used as a reference in research preparation. GDP shows variations in all economic activities, including the ability to show how a country produces goods and services. GDP also shows the business cycle that is likely to affect the performance of a country's institutions negara (Salim & Suripto, 2023). According to (Suripto & Subayil, 2020) in his research, the percentage change in GDP on a national scale and the percentage change in GRDP for the Regency / City / Province ratio are standard benchmarks to review the economic growth rate. The added value of goods and services produced by reference to prices prevailing in the year determined as GRDP indicates the base year at constant prices. Economic growth is one of the most critical indicators for analyzing development and is a benchmark for achieving economic development in a region (Kustanto, 2020). Success achieved in economic growth can be seen in increasing national income and per capita income and reducing national inequality.

Increasing the total GRDP can trigger the economic growth rate accompanied by sector development to become an impetus in economic development (Tumangkeng, 2018). Setting development priorities is very important to encourage each sector's development, accelerate each sector's growth rate, and increase labor absorption capacity (Karmini et al., 2022). In this case, it can be related to the research produced by (Arsyad, 2015), which states that economic development is a long-term process aimed at increasing the real income per capita of the country's population.

Based on research produced by (Juniarta & Khoirudin, 2023) states that there are leading/base sectors in several regencies/cities in East Kalimantan. Research conducted by (Mahrita et al., 2016) said that sectors in East Kalimantan that have high competitiveness are in the form of agriculture, electricity, mining and quarrying, gas and clean water, building sector, trade, hotels, and restaurants, as well as the financial sector and service sector. On the other hand, research (Risdiyantanti, 2019) said that East Kalimantan has a superior sector in the Mining, Quarrying, and Processing Industry.

## **3 RESEARCH METHODOLOGY**

This study aims to test the hypothesis, namely to test whether there is a fundamental relationship and answer the research questions posed and use quantitative data, which is shown in the form of data that can be calculated as a number or number variable (Yuniarti & Sukarniati, 2021).

The source is the Central Statistics Agency (BPS) of East Kalimantan Province from 2018 to 2022. The data used is sectoral data on East Kalimantan's GRDP and Indonesia's GDP, with a total number of business fields of 17 sectors concerning constant prices. The analysis applied in this research uses three analysis methods: Location Quotient (LQ), Shift Share (SS), and Klessen Typology.

### 1. Location Quotient (LQ) Analysis

Location Quotient (LQ) is a method for calculation by comparing the relative amount of value-added contribution of a sector in a region (Regency / City / Province) to the contribution of value-added of related sectors on a provincial or national scale. Using the LQ method, a test can find an analysis that the sector in a region is classified as a primary or non-basic sector. The application of analysis using the Location Quotient (LQ) method can be written using the formula :

$$LQ = \frac{X_i^R / X^R}{X_i^N / X^N}$$

Description:

LQ = Location Quotient  
Xi = East Kalimantan Province GDRP Sector Output  
XR = Total Output of East Kalimantan Province GRDP Sector  
XiN = National GDP Sector Output  
XN = Total Output of National GDP Sector

Then, to measure the assessment results based on the results of data processing using the LQ method, it can be measured using the following criteria:

- LQ > 1 means that the economic sector in East Kalimantan Province is more specialized than the same sector in the national sector. This sector has export activities and a comparative advantage, so it is categorized as primary.
- LQ = 1 means that the economic sector in East Kalimantan Province has the exact specifications as a similar sector in the nation. There are indications that production activities are only enough to fulfill the region and are classified as a Non-Base sector.
- LQ < 1: means that the economic sector in East Kalimantan Province has smaller specifications than the same sector in the National sector. In addition, there are indications of import activities in the sector, which can be categorized as a Non-Base sector.

### 2. Shift Share Analysis (SS)

Shift Share Analysis is a method of analyzing changes in economic activity in a period to compare the development of a sector in the region relative to other sectors. The results of these data can identify sectors that can compete more effectively. This analysis assumes that production changes are influenced by three components, namely regional economic growth (Nij), proportional growth (Mij), and regional share growth (Cij).

The formula used in the Shift Square (SS) analysis method is as follows:

National Growth Formula

$$N_{ij} = Y_{ij} \times r_a$$

Proportional Growth Formula

$$M_{ij} = Y_{ij} (r_{in} - r_n)$$

Regional Growth Share Formula

$$C_{ij} = Y_{ij} (r_{ij} - r_{in})$$

Description:

$Y_{ij}$  = GRDP of East Kalimantan Sector

$Y_{(in)}$  = National sector GRDP

$Y_{(n)}$  = National GDP in base year

$R_{ij}$  = East Kalimantan Sector Change

$R_{in}$  = National Sector Change

$R_n$  = National Base Year Change

The details above can be written with the following equation:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij}$$

Description:

$N_{ij}$  = National Growth

$D_{ij}$  = Net Change in East Kalimantan Sector

$M_{ij}$  = Proportional Growth of East Kalimantan Sector

$C_{ij}$  = Comparative Advantage of East Kalimantan

The test results can be analyzed using the following criteria:

- a) When the value of  $(N_{ij}) > 0$ , it can be assumed that all economic sectors in East Kalimantan experience positive growth and are more rapidly influenced by national growth. However, when the value of  $(N_{ij}) < 0$  or negative, the East Kalimantan sector has slower growth than the national sector.
- b) When the value of  $(M_{ij}) > 0$ , it can be stated that the economic sector in East Kalimantan is developed, has positive growth, and is higher than national economic growth. Conversely, when the value of  $(M_{ij}) < 0$  or shows a negative value, the economic sector has a slow growth rate.
- c) When the value of  $(C_{ij}) > 0$ , it can be stated that the economic sector in East Kalimantan can compete with the same product so that it has a comparative advantage and is highly competitive. If the value of  $(C_{ij}) < 0$  or negative, then the sector has not been able to compete, and the sector is not included in the superior sector in East Kalimantan.

### 3. Klassen Typology

The Klassen typology method analysis can be used to determine the focus of a region's policy based on the economic conditions of the national economy and a reference region. In this analysis, there are four classifications as follows:

- a) Quadrant I (Advanced and Fast Growing Sectors)

The economic sector in Quadrant I is the leading and most promising sector in East Kalimantan. Its growth rate and contribution to GRDP are more significant than those of the national sector. Quadrant I classification can be described as East Kalimantan Growth  $(R_i) > \text{National } (R)$  and  $Y_i > Y$ .

- b) Quadrant II (Advanced but Depressed Sector)

The economic sector, Quadrant II, is also among the leading economic sectors in a region's economy. However, they are saturated sectors where East Kalimantan has a growth value  $(R_i) < \text{National growth } (R)$ . On the other hand, the sector contribution in East Kalimantan  $(Y_i) > \text{National } (Y)$ .

- c) Quadrant III (Potential Sectors or Can Still Proliferate)

The economic sector in quadrant III is an economic sector that is not included in the leading sector. This occurs when the economic sector's growth value is significant, and the proportion of the economic sector's contribution to regional formation is also low. The calcification of this sector can be interpreted as  $R_i > R$  and  $Y_i < Y$ .

d) Quadrant IV (Relatively Underdeveloped Sector)

Economic sectors in quadrant IV do not include leading sectors where the sector is in a condition where the value of regional economic growth is lower than that of national economic growth. This classification is described by  $R_i < R$  and  $Y_i < Y$ .

## 4 RESULT AND DISCUSSION

B In this section, the author presents brief conclusions from the results of the research with suggestions for advanced researchers or general readers. A conclusion may cover the main points of the paper, but do not replicate the abstract in the conclusion. Authors should explain the empirical and theoretical benefits, the economic benefits, and the existence of any new findings.

**Table 1. Results of Location Quotient (LQ) Analysis of Economic Sectors of East Kalimantan Province in 2018-2022**

Business Field	Loaction Quotient					Average	Category
	2018	2019	2020	2021	2022		
A. Agriculture, Forestry and Fisheries	0,53	0,53	0,52	0,52	0,52	0,52	Non Basis
B. Mining and Quarrying	5,91	6,25	6,17	6,11	6,08	6,10	Basis
C. Processing Industry	0,95	0,92	0,93	0,93	0,92	0,93	Non Basis
D. Procurement of Electricity and Gas	0,05	0,06	0,06	0,06	0,06	0,06	Non Basis
E. Water Supply, Waste Management, Waste and Recycling	0,57	0,56	0,57	0,57	0,60	0,58	Non Basis
F. Construction	0,69	0,70	0,73	0,74	0,78	0,73	Non Basis
G. Wholesale and Retail Trade; Car and Motorcycle Repair	0,40	0,40	0,43	0,43	0,44	0,42	Non Basis
H. Transportation and Warehousing	0,69	0,66	0,74	0,74	0,70	0,71	Non Basis

I. Provision of accommodation and food and drink	0,28	0,28	0,30	0,30	0,29	0,29	Non Basis
J. Information and Communication	0,29	0,28	0,28	0,28	0,29	0,29	Non Basis
K. Financial Services and Insurance	0,35	0,34	0,34	0,35	0,37	0,35	Non Basis
L. Real Estate	0,30	0,29	0,29	0,28	0,29	0,29	Non Basis
M N. Service Company	0,10	0,10	0,10	0,10	0,10	0,10	Non Basis
O. Government Administration, Defense and Mandatory Social Security	0,49	0,49	0,48	0,49	0,52	0,49	Non Basis
P. Education Services	0,45	0,44	0,45	0,47	0,48	0,46	Non Basis
Q. Health Services and Social Activities	0,49	0,48	0,52	0,54	0,55	0,52	Non Basis
R,S,T,U Other Services	0,30	0,29	0,29	0,29	0,29	0,29	Non Basis

Source: Data Processing, 2023

Based on the table above, the results of the Location Quotient analysis of 17 economic sectors in East Kalimantan Province show that only one sector is included in the Base sector category, namely the Mining and Quarrying sector. The average value of the sector is 6.1 or more than 1, which means that the sector is superior. The mining and quarrying sector is very prospective and has a high potential to be developed to improve the regional economy. This study's results align with research conducted (Risdiantanti, 2019), which states that the Mining and Quarrying sector is the leading sector in East Kalimantan. Meanwhile, 16 sectors are classified as Non-Base and are not among the leading sectors. The Non-Base sector is called because it has an average value < 1. These sectors include the agriculture, Forestry, and Fisheries sector with an average LQ value of 0.52; the Manufacturing sector with an average LQ value of 0.93; the Electricity and Gas Procurement sector, with an average LQ value of 0.06; Water Procurement, Waste Management, Waste, and Recycling sector with an average LQ value of 0.58; Construction sector with an average LQ value of 0.73; Wholesale and Retail Trade, Car and Motorcycle Repair sector with an average LQ value of 0.42; ; Transportation and Warehousing sector with an average LQ value of 0.42; Accommodation and Drinking Food Supply sector, Information and Communication sector, Real estate sector and other services sector with an average LQ value of 0.29; Financial and Insurance Services sector with an average LQ value of 0.35; Corporate Services sector with an average LQ value of 0.10; Government administration, Defense and mandatory social security sector with an average LQ value of 0.49; Education



services sector with an average LQ value of 0.46, and Health services and social activities sector with an average LQ value of 0.52. In this case, the 16 sectors indicate importing to meet regional needs. Increasing import activities will increase the Gross Domestic Product (Yuniarti, 2007).

**Table 2. Results of Shift Share Analysis of Economic Sectors in East Kalimantan Province 2018-2022**

Business Field	<i>Shift share</i>			
	<i>Nij</i>	<i>Mij</i>	<i>Cij</i>	<i>Dij</i>
A. Agriculture, Forestry and Fisheries	3.838.249,91	- 676.478,78	- 1.652.597,87	1.509.173,26
B. Mining and Quarrying	26.116.054,57	- 9.191.867,75	338.134,35	17.262.321,18
C. Processing Industry	11.559.777,32	- 2.590.646,06	- 6.114.691,90	2.854.439,36
D. Procurement of Electricity and Gas	31.268,78	6.238,90	37.908,23	75.415,91
E. Water Supply, Waste Management, Waste and Recycling	26.819,13	21.421,10	5.284,85	53.525,08
F. Construction	4.030.977,73	- 1.562.673,16	3.665.430,88	6.133.735,45
G. Wholesale and Retail Trade; Car and Motorcycle Repair	3.066.643,03	- 213.040,99	1.604.530,15	4.458.132,19
H. Transportation and Warehousing	1.664.484,84	- 14.421,78	- 286.486,51	1.363.576,55
I. Provision of accommodation and food and drink	487.271,27	- 61.526,88	71.483,91	497.228,29
J. Information and Communication	871.228,12	1.994.396,24	- 448.745,07	2.416.879,29
K. Financial Services and Insurance	806.312,57	135.809,70	318.488,66	1.260.610,94
L. Real Estate	504.829,89	50.533,50	- 384.767,51	170.595,88
M N. Service Company	107.022,56	20.499,77	- 63.353,93	64.168,40
O. Government Administration, Defense and Mandatory Social Security	948.386,78	- 399.031,26	236.229,90	785.585,43
P. Education Services	809.716,44	- 142.899,05	232.567,20	899.384,59

Q. Health Services and Social Activities	321.417,14	689.405,09	346.446,93	1.357.269,16
R,S,T,U Other Services	304.381,63	168.135,73	- 170.077,75	302.439,61

Source: Data Processing, 2023

Based on the Shift Share model analysis results in Table 2 above, the Nij value shows the value of each sector where all sectors in East Kalimantan have positive values. All sectors experience positive growth and are influenced by national growth.

The Nij column shows positive values in all sectors; all sectors are experiencing positive growth influenced by national growth. Then, eight sectors have a positive value for the Mij value in each sector. This means the sector has a faster growth rate than the national sector. Among the eight sectors that have fast growth, there is one sector with a value of 689,405.09, which shows the highest value among other sectors: the Health Services and Social Activities sector. Meanwhile, for the nine sectors that have negative values, the sector has a slower growth than the national sector.

The Cij value in the above table shows ten sectors with positive values and 7 with negative values. Sectors with a positive value believe in the sector in East Kalimantan, which has a comparative advantage and is competitive against the national sector. Conversely, if the sector shows a negative value, it means that the sector does not have a comparative advantage and does not have national competitiveness. Then, the overall Dij value in each sector in East Kalimantan shows a positive value, so the entire sector tends to be developed.

**Table 3. Results of Klessen Typology Analysis of Economic Sectors in East Kalimantan Province 2018-2022**

Business Field	KALTIM		INDONESIA		Description	Quadrant
	Average Growth	Average Distribution	Average Growth	Average Distribution		
A. Agriculture, Forestry and Fisheries	0,01	0,00	0,02	-0,01	Developed but depressed sectors	II
B. Mining and Quarrying	0,02	-0,02	0,02	0,07	Potential or fast-growing sectors	III
C. Processing Industry	0,01	-0,02	0,02	0,10	Relatively lagging sectors	IV
D. Procurement of Electricity and Gas	0,07	0,19	0,03	0,10	advanced and fast-growing sectors	I
E. Water Supply, Waste Management, Waste and Recycling	0,05	0,12	0,05	-0,06	advanced and fast-growing sector	I
F. Construction	0,04	0,05	0,02	0,10	Potential or fast-growing sector	III

G. Wholesale and Retail Trade; Car and Motorcycle Repair	0,04	0,06	0,03	0,12	Potential or rapidly growing sector	III
H. Transportation and Warehousing	0,03	-0,03	0,04	0,39	relatively lagging sector	IV
I. Provision of accommodation and food and drink	0,03	-0,02	0,03	0,27	Potential or rapidly growing sector	III
J. Information and Communication	0,07	0,17	0,09	-0,15	Developed but depressed sector	II
K. Financial Services and Insurance	0,04	0,08	0,03	-0,04	Developed and rapidly growing sector	I
L. Real Estate	0,01	0,02	0,03	-0,02	Developed but depressed sector	II
M N. Service Company	0,02	-0,01	0,04	0,16	Relatively underdeveloped sector	IV
O. Government Administration, Defense and Mandatory Social Security	0,02	-0,01	0,02	0,02	Potential sector or can still grow rapidly	III
P. Education Services	0,03	0,07	0,02	-0,04	advanced and fast-growing sector	I
Q. Health Services and Social Activities	0,11	0,34	0,08	-0,17	advanced and fast-growing sector	I
R,S,T,U Other Services	0,03	0,01	0,05	0,14	relatively lagging sector	IV

Source: Data Processing, 2023

**Table 4. Results of Quadrant Analysis of Economic Sectors in East Kalimantan**

Quadrant I	Quadrant II Agriculture, Forestry and Fisheries, Information and Communication, Real Estate
------------	--

Electricity Procurement, Water Procurement, Garbage, Waste and Recycling Management, Educational Services, Health services and Social Activities	
Quadrant III Mining and Quarrying, Construction, Wholesale and Retail Trade, Repair of Automobiles and Motorcycles, Provision of Accommodation and Meals, Government Administration, Defense and Compulsory Social Security	Quadrant IV Manufacturing Industry, Transportation and Trade, Corporate Services, Other Services

Based on the results of the Klessen Typology analysis above, all sectors in East Kalimantan are assigned different quadrant categories. Sectors in Quadrant I indicate a developed and rapidly growing industry, while those in Quadrant II indicate a developed but depressed sector. Quadrant III indicates a potential sector that can still increase, and Quadrant IV indicates a relatively lagging industry.

Looking at the quadrant classification table above, four sectors are included in this Quadrant: the Electricity Procurement Sector, Water Procurement, Waste Management, Waste and Recycling Sector, Education Services Sector, and Health Services and Social Activities sector. These four sectors are leading economic sectors with national economic sector growth rates. The industry can encourage the development of financial conditions in East Kalimantan. On the other hand, the Agriculture, Forestry, and Fisheries sectors, the Information and Communication sector, and the Real Estate sector are in the Quadrant II position. In Quadrant II, the relevant sectors are declared leading sectors even though the economic growth rate is smaller than the national economic growth. However, the industry in Quadrant II has a higher value of economic sector contribution proportion than the financial sector contribution at the national level.

Quadrant III shows sectors that have potential and can still increase. Economic sectors included in Quadrant III include:

- The Mining and Quarrying sector.
- Construction sector.
- Wholesale and Retail Trade sector.
- Car and Motorcycle Repair sector.
- Accommodation and Drinking Food Provision sector.
- Government Administration sector.
- Defense and Compulsory Social Security sector.

In this quadrant, the relevant sector is not included as a leading sector because it has a significant economic sector growth value but a low proportion of financial sector contributions to regional formation. Quadrant IV is the lowest quadrant, covering economic sectors that are lagging behind and not included as a leading sector. This is due to the low value of regional economic growth rather than national economic growth. Thus, the industry's output value development is slow, so the regional area does not try to create greater output.

## **5 CONCLUSION AND RECOMMENDATION**

Based on the analysis that has been carried out, it can be concluded that the economic sector in East Kalimantan Province has industries that are categorized as leading sectors (Basis) and non-leading sectors (Non-Basis). Based on the results of the LQ analysis, the leading sector (Basis) in East Kalimantan in 2018-2022 is only in the mining and quarrying sector. The mining and quarrying sector has high prospects for developing and improving the economy in East Kalimantan. The most significant possibility for the mining and quarrying sector when exporting is that the industry is experiencing a surplus. On the other hand, 16 sectors in East Kalimantan are not in the Basis or Superior category. These sectors stated that they have not been able to meet regional needs, so imports are still needed.

Based on the Shift share analysis results, it can be concluded that all economic sectors in East Kalimantan have positive growth influenced by national growth. Meanwhile, based on the Mij (National Growth) calculation results, it can be concluded that eight sectors show a faster growth specification than the national economy. These sectors include Electricity and Gas Procurement, Water Procurement, Waste Management, Waste and Recycling, Information and Communication, Financial Services and Insurance, Real Estate, Corporate Services, Health Services and Social Activities, and Other Services. Then, based on the results of the CIJ calculation (determining competitiveness), ten sectors have a comparative advantage. In this case, ten economic sectors in East Kalimantan have competitiveness against similar sectors in other regions nationally. Sectors that have a comparative advantage include the Mining and Quarrying Sector, Electricity and Gas Procurement Sector, Water Procurement Sector, Waste Management Waste and Recycling Sector, Construction Sector Wholesale and Retail Trade, Car and Motorcycle Repair Sector, Accommodation and Food Supply Sector, Financial, and Insurance Services Sector; Government Administration, Defense, and Compulsory Social Security Sector; Education Services Sector; and Health and Social Services Sector. Through Shift Share analysis, it can also be concluded that all East Kalimantan sectors are developed and have progressive growth.

Based on the results of the Klassen Typology analysis, it can be concluded that the sectors in East Kalimantan have different categories. In this test, it can be seen that the Electricity and Gas Procurement sector, Water Procurement, Waste Management, Waste and Recycling sector, Education Services sector, and Health Services and Social activities sector are developed sectors and have rapid growth and can encourage the development of economic conditions in East Kalimantan. On the other hand, some sectors have high potential and can still increase; these sectors include the Mining and Quarrying Sector, Construction Sector, Wholesale and Retail Trade Sector, Automobile and Motorcycle Repairs Accommodation and Food Supply Sector, and Government Administration, Defense, and Social Security Sector. The sectors in East Kalimantan that are developed but depressed are the Agriculture, Forestry, and Fisheries Sectors, the Information and Communication Sector, and the Real Estate Sector. Meanwhile, the relatively lagging sectors in East Kalimantan include the Manufacturing Industry Sector, Transportation and Warehousing Sector, Corporate Services Sector, and Other Services Sector.

### **IMPLICATION/LIMITATION AND SUGGESTIONS**

Sectors classified as Basis sectors in East Kalimantan are expected to be maintained by encouraging capital investment and increased investment in technology. Then, for industries not classified as bases, the potential in the East Kalimantan region is expected to be reviewed. This potential can be developed to create jobs in the economic sector. On the other hand, infrastructure needs to be improved to keep up with economic competition in the global world.

Thus, the abundance of potential that can be developed in the financial sector can create a productive population composition to support the realization of Advanced Indonesia.

## REFERENCES

- A'yun, I. Q., Vianti, W. O., & Zainal, Z. (2022). Determinants of Original Local Government Revenue (PAD) Case Studies of 34 Provinces in Indonesia. *JAMPE (Journal of Asset Management and Public Economy)*, 1(2), 35–46.
- Ardina D.R., dkk. (2020). Analisis Pengaruh Transformasi Struktural Terhadap Pertumbuhan Ekonomi Di Indonesia Tahun 2001-2018. *Paradigma Multidisipliner*, 1(1), 13–21.  
<http://smkn1magelang.sch.id/jpm/index.php/jpm/article/view/1/1>
- Arsyad, L. (2015). Ekonomi Pembangunan dan Pembangunan Ekonomi. *Ekonomi Pembangunan Berkelanjutan*, 05(01), 1–37.
- Basuki, M., & Mujiraharjo, F. N. (2017). Analisis Sektor Unggulan Kabupaten Sleman dengan Metode Shift Share dan Location Quotient. *Jurnal Sains, Teknologi Dan Industri*, 15(1), 52–60.  
<https://doi.org/10.4103/2276-7096.188531>
- Iverson, B. L., & Dervan, P. B. (n.d.). *No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析* Title. 7823–7830.
- Juhanis. (2012). Pengaruh Sektor Unggulan Terhadap Pertumbuhan Ekonomi Wilayah Kabupaten Halmahera Selatan. *Jurnal Plano Madani*, 1(1), 16–28.
- Juniarta, T., & Khoirudin, R. (2023). *Analisis Potensi Ekonomi dan Sektor Unggulan Kabupaten / Kota di Provinsi Kalimantan Timur*. 06.
- Karmini, K., Saroyo, S., Karyati, K., Widiati, K. Y., Widuri, N., & Sulichantini, E. D. (2022). Sektor Unggulan Di Kabupaten Kutai Barat Dan Kontribusinya Dalam Penyerapan Tenaga Kerja Di Provinsi Kalimantan Timur. *Jurnal Riset Pembangunan*, 5(1), 22–32.  
<https://doi.org/10.36087/jrp.v5i1.114>
- Kustanto, A. (2020). Buletin Studi Ekonomi. Vol. 25 No. 1, Februari 2020. *Pertumbuhan Ekonomi Regional Di Indonesia: Peran Infrastruktur, Modal Manusia Dan Keterbukaan Perdagangan*, 25(1), 22–40. <https://ojs.unud.ac.id/index.php/bse/article/view/55427>
- Mahrta, Mintarti, S., & Fitriadi. (2016). Analisis Sektor Ekonomi Provinsi Kalimantan Timur. *INOVASI : Jurnal Ekonomi Keuangan, Dan Manajemen*, 12(2), 235–249.  
<http://journal.feb.unmul.ac.id>
- Mahrus Lutfi Adi Kurniawan, N. P. (2014). Pertumbuhan Ekonomi Dan Penentuan Titik Ambang Batas Inflasi Di Indonesia. *Jurnal Ekonomi Dan Studi Pembangunan*, 15(April), 72–77.  
<https://journal.umy.ac.id/index.php/esp/article/view/1263/1319>
- Nafisah, E. F., & Sukarniati, L. (2015). Impact on Development of Tourism in Gunungkidul Regency To Economic Conditions of Community Around. *Bisnis & Ekonomi*, 13(2), 105–115.
- Risdiantanti, Z. (2019). *Analisis Potensi Ekonomi Sektoral Sebagai Sektor Unggulan Di Wilayah Provinsi Kalimantan Timur Periode 2014-2018*. 1, 105–112.
- Salim, A., & Suripto, S. (2023). Does prudential capital reduce bank risk-taking? Empirical evidence from the Indonesian banks industry. *Jurnal Ekonomi & Studi Pembangunan*, 24(1), 182–197.  
<https://doi.org/10.18196/jesp.v24i1.17696>

- Suripto, Firmansyah, & Sugiyanto, F. X. (2020). Poverty viewed from the perspective of domestic production in Yogyakarta: The Solow growth model approach. *International Journal of Business and Globalisation*, 24(2), 174–184. <https://doi.org/10.1504/IJBG.2020.105166>
- Suripto, & Subayil, L. (2020). Pengaruh Tingkat Pendidikan, Pengangguran, Pertumbuhan Ekonomi Dan Indeks Pembangunan Manusia Terhadap Kemiskinan Di D.I.Yogyakarta Priode 2010-2017. *Jurnal Ilmiah Ekonomi Pembangunan*, 1(2), 127.
- Tumangkeng, S. (2018). Analisis Potensi Ekonomi Di Sektor Dan Sub Sektor Pertanian, Kehutanan Dan Perikanan Kota Tomohon. *Jurnal Berkala Ilmiah Efisiensi*, 18(1), 12.
- Yuniarti, D., & Sukarniati, L. (2021). Penuaan Petani dan Determinan Penambahan Tenaga Kerja di Sektor Pertanian. *Agriekonomika*, 10(1), 38–50. <https://doi.org/10.21107/agriekonomika.v10i1.9789>
- Zakiyyah, N. A. A., Lubis, F. R. A., & Wahyuni, I. (2023). Determinants of poverty in Indonesia. *Eko-Regional: Jurnal Pembangunan Ekonomi Wilayah*, 18(2), 210–222. <https://doi.org/10.24197/st.2.2021.243-267>