



## Katingan District leading sectors and potential analysis

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### ABSTRACT

*This research aims to evaluate development planning, economic growth, and identify potential sectors in Central Kalimantan Province, especially in Katingan Regency. The data used is secondary data which has been arranged chronologically over a certain period and has been published by government institutions, such as the "Central Statistics Agency for Katingan Regency and Central Kalimantan Province in 2022." More detailed information is obtained through journals and books relevant to the field of Economics. To analyze the comparative role of a sector/industry in Katingan Regency, Location Quotient (LQ) analysis is used. The data taken is the Gross Regional Domestic Product (GRDP) of Katingan Regency compared to the GRDP of Central Kalimantan Province at constant prices, during the 2018-2022 period. In that period, Katingan Regency experienced an increase of IDR 2,566,675.91. Economic growth in Katingan Regency can be attributed to several factors, including the influence of economic growth in Central Kalimantan Province, the influence of industrial mix, and the influence of competitive advantage..*

*Keywords: Katingan Regency, Leading Sector, LQ, MRP, Shift Share*

## 1. INTRODUCTION

Development is an intricate process that encompasses multiple basic transformations in social structures, societal attitudes, and national institutions (Castro-Arce & Vanclay, 2020). In addition to addressing income disparities and alleviating poverty, the primary objective is to expedite economic expansion. Effective planning is crucial for achieving success. Hence, in the context of economic development, it is imperative for regions to possess a comprehensive understanding of their economic capabilities and conduct a thorough analysis in order to identify key sectors based on their potential. This stage serves as the foundation for comprehending the potential for regional economic growth, aiming to attain regional autonomy and fair development across the nation by employing a productive and streamlined planning strategy (Iwan & Arisman, 2023).

Regional development aims to achieve Gross Regional Domestic Product (GRDP) targets at the national, regional, and local scales (Coscieme et al., 2020). Regional economic development entails the collaboration of local governments and diverse social groups in the management of resources and collective endeavors to foster job creation and stimulate economic growth within a society. Key indicators of development success encompass factors such as robust economic growth, a well-balanced economic structure, population dynamics, and the narrowing of income disparities among different regions or sectors. The success of regional development is also contingent upon the external demand for goods and services, which enables the utilization of local resources to generate wealth and employment prospects (Henrysson & Nuur, 2021). Effective planning is crucial as market mechanisms alone are insufficient to accomplish economic progress. Planning entails continual operations in which numerous possibilities are evaluated to improve the utilization of resources towards future goals (Budiono et al., 2021).

Initial step in development planning is the identification of economically advantageous industries or sectors with growth potential in the region (Fatima et al., 2020). Statistical data serves as the foundation for economic development planning, allowing for the identification of policy measures that can effectively meet development objectives (Zakiah et al., 2023). There are two primary indications that may be used to assess potential economic activity in a region: regions that currently possess advantages and regions that have the potential to benefit in the future. By identifying the economic potential of places, policymakers may formulate development strategies that foster economic expansion (Magdalena & Suhatman, 2020).

Part of the explanation above is to look at the economic potential of Katingan Regency, so it is vital to carry out research to discover better sectors in more detail, especially in the Katingan Regency displayed. This will facilitate the assessment of development performance in order to formulate more focused regional development plans in the future, enhance the usage of regional economic potential to expedite economic growth, and serve as a foundation for executing prioritized measures.

## 2. LITERATURE REVIEW

The definition of development planning is a systematic effort by various actors (actors), both government (public), private and other community groups at different levels to create a pattern of interdependence and interrelationship between physical, socio-economic and other aspects with the following way (Cashore et al., 2021):

- a. Continuously analyze the conditions and implementation of regional development.
- b. Formulate the objectives of regional development policies.
- c. Develop strategic concepts for problem solving.
- d. Implement using all available resources.

Several indicators for measuring success in development are (Brugmann, 2021):

- a. Income per capita

Per capita income, both in terms of GNP and GDP, is a macro-economic indicator that has long been used to measure economic growth. From a macro-economic perspective, this indicator is a part of welfare that can be measured, so it can describe the prosperity of society.

- b. Economic Structure

The increase in per capita income will reflect structural transformations in the economy and social class. With economic development and an increase in per capita, the contribution of the manufacturing/industry and services sectors to national income will continue to increase.

The basic idea underlying the creation of this index is the importance of paying attention to the quality of human resources because development should be directed at developing human resources. In this understanding, development is defined as a process that aims to develop choices that humans can make. This is based on the assumption that improving the quality of human resources will be followed by the opening of various choices and opportunities to determine the course of human life freely.

The economic basis theory was put forward that the main determining factor for a region's economic growth is a direct relationship with demand for services from outside the region (Harjanti et al., 2021). In this theory, all regions constitute an integrated socio-economic system. This theory is what underlies the thinking of the location question technique, namely a technique that helps in determining the export capacity of a regional economy and the degree of self-sufficiency of a sector. Location Question (LQ) is used to determine the level of specialization of the base sector by comparing its role in the regional economy with the role of similar activities or industries in the national economy.

This basic theory is classified into two sectors, namely the basic sector and the non-basic sector. The base sector is a sector that carries out export-oriented activities outside the boundaries of the relevant economic area. The basic sector has a main driving role in the growth of a region. The greater the exports of a region, the more advanced the region's growth. Meanwhile, the non-based sector provides goods and services to the community within the boundaries of the relevant economic area. Wide scope and marketing is local. The essence of this theory is that the direction and growth of an economy is determined by the region's exports.

Base theory is also known as advantage (competitive advantage), namely the ability of a region to market its products outside the region or global market. There are several influencing factors such as resources, technology, regional access, markets, production centers, workforce, nature of society and government policies (Tödtling et al., 2020). Several methods for distinguishing between base economic activities and non-base economic activities are:

- a. Direct Method

This was carried out by conducting direct surveys with business actors, where they market the goods they produce and where they buy the materials needed to produce products. From their answers it is determined what percentage of products are sold outside the region and what percentage of products are sold within the region. An example of the direct method is: a clothing factory where some of the products are sold outside the region and some are sold within the region.

b. Indirect Method

By making assumptions or what is usually called the assumption method. In this method, based on the conditions of the region (based on secondary data), there are certain activities which are assumed to be basic and other activities as non-basic activities. Activities where the majority of the product is sold outside the region or the majority of the money coming in comes from from outside the immediate area is considered a base. There are activities that are categorized as basic activities, for example: mining and agricultural activities whose results are taken outside the region.

c. Mixed Methods

Mixed methods are secondary data collection methods, usually from government agencies or data collection institutions such as BPS. The assumption is that if 70% or more of the product is estimated to be sold outside the region then it is called base activity, if 70% is sold within the region then it is called non-base activity. For example, the majority of palm oil is exported, although some are purchased by cooking oil products designated for local consumption or export.

d. Location Query Method

This method compares the share of employment/added value for certain sectors in our region compared to the share of employment/value added for the same sector nationally. 23 With a formula that can be written:

$$LQ = (S_i / N_i) / (S / N)$$

Where  $S_i$  = added value of the regional industrial sector

$N_i$  = Total income of all lower regional sectors

$S$  = added value of sector  $i$  nationally

$N$  = total income of all upper regional sectors (Lampung Province)

From the LQ calculation the following conclusion can be drawn: If the LQ value is  $>1$  then the role of the sector in that region is more prominent than the role of the sector nationally. If the LQ value  $<1$  then the role of the sector in the region is smaller than the role of the sector nationally. If the LQ value is  $>1$ , it indicates that the role of sector  $i$  is quite prominent in the area and is often an indication that the area has a surplus of sector  $i$ 's products and is exploring them in other areas. Therefore,  $LQ > 1$  indirectly indicates that the area has a comparative advantage. This region is only likely to explore products locally or abroad because it is able to produce these products more cheaply and efficiently. On that basis,  $LQ >$  indirectly shows the area's comparative advantage for sector  $i$  in question. 24 Apart from having advantages, this LQ analysis method has limitations, the following are the advantages and disadvantages of LQ: The advantages of LQ can identify superior commodities, including that its application is simple and does not require a data processing program, complicated one. Completion of the analysis is sufficient with a spreadsheet from Excel or the Lotus program and other calculating tools. The limitations of LQ are due to the simplicity of this approach, which requires data accuracy. No matter how good the LQ processing is, it will not be useful if the data used is invalid.

The first activity carried out in regional development planning is to conduct a review of the situation, problems and development potential. According to Arsyad, the main problem in development lies in emphasizing development policies that are based on the specificities of the region concerned by using the potential of human resources, institutions and physical resources locally (regionally). Regional economic development refers to superior sectors in addition to having an impact on Accelerating economic growth will also affect the economic structure. According to Emma, a leading sector is a sector or economic activity that has better potential, performance and prospects than other sectors so that it is expected to be able to drive other derivative business activities. A leading sector can also be interpreted as a sector that drives economic growth in the surrounding area as indicated by the parameters:

- a. This sector must produce products that have a large enough demand, so that the growth rate develops quickly.
- b. Sectors that have a high multiplier effect.
- c. Has high added value potential.

Determining superior sectors is important as a basis for planning regional economic development in accordance with the current era of regional autonomy, where regions have the authority to make policies that are in accordance with their regional potential to accelerate regional economic development and create community prosperity.

### 3. METHODS

This research adopts a quantitative approach with a descriptive nature, which involves data analysis by explaining information from various sources available at relevant agencies as well as book and journal references. This research was carried out in Katingan Regency, Central Kalimantan Province, with the aim of determining the base sectors and sectors that have development opportunities in the region. The data in this research was obtained from secondary sources which have been compiled sequentially over a certain period of time and have been published by government agencies, such as the "Central Statistics Agency for Katingan

Regency and Central Kalimantan Province in 2022." More in-depth details are gathered through literature studies, including journals and books related to the economics discipline. In analyzing research data, five various analysis techniques were used. Comparative analysis of the role of a sector or industry in Katingan Regency was carried out using the Location Quotient (LQ) method. The type of data implemented is the GRDP (Gross Regional Domestic Product) of Katingan Regency which is compared with the GRDP of Central Kalimantan Province at constant prices, for the 2018-2022 period. The formula is as follows:

$$LQ = \frac{\left(\frac{X_{ir}}{X_r}\right)}{\left(\frac{X_{in}}{X_n}\right)}$$

Information :

LQ = Location Quotient Katingan Regency

X<sub>ir</sub> = Katingan Regency Sector GRDP

X<sub>r</sub> = Total GDP of Katingan Regency

X<sub>in</sub> = GDP Sector of Central Kalimantan Province

X<sub>n</sub> = Total GDP of Central Kalimantan Province

Tarigan (2005: 82) interprets the amount of LQ as follows:

- a. LQ > 1 indicates that the role of a particular sector in an area is more significant than the role of the same sector in the reference area. This reflects that the sector has a fairly prominent role in the region, and often indicates that the region has a surplus of products from the sector that can be exported to other regions.
- b. LQ < 1 indicates that the role of the sector in the area is smaller than the role of the reference sector. Meanwhile LQ = 1 indicates that the role of the sector in the area is equivalent to the role of the reference sector. In this case, the sector is able to meet its own local needs.

Analysis of changes in the economic structure of Central Kalimantan Province was carried out using the Shift-Share method (Sasa et al., 2022). The data used includes changes in added value per sector in Katingan Regency and Central Kalimantan Province during the period 2018 to 2022. This method focuses on evaluating economic structural changes to assess the contribution of certain sectors in forming economic added value in the two regions. The equation implemented to study area j for sector i is:

- Equation for assessing the "competitive advantage" of region j for sector i  
N<sub>ij</sub> = r<sub>n</sub> · E<sub>ij</sub>
- Equation for assessing the "industrial mix" of region j for sector i  
M<sub>ij</sub> = (r<sub>in</sub> - r<sub>n</sub>) · E<sub>ij</sub>
- Equation for assessing "regional growth" in region j for sector i  
C<sub>ij</sub> = (r<sub>ij</sub> - r<sub>in</sub>) · E<sub>ij</sub>
- The variable that represents the changing GRDP in region j for sector I, namely D<sub>ij</sub>

The growth formula for sector i in the study area is as follows:

r<sub>ij</sub> = (E\*<sub>ij</sub> - E<sub>ij</sub>) / E<sub>ij</sub>, where r<sub>ij</sub> represents the growth rate in sector i in the study area.

r<sub>in</sub> = (E\*<sub>in</sub> - E<sub>in</sub>) / E<sub>in</sub>, where the variable that represents "the growth rate throughout the reference area" is r<sub>in</sub>.

r<sub>n</sub> = (E\*<sub>n</sub> - E<sub>n</sub>) / E<sub>n</sub>, where r<sub>n</sub> is the economic growth of the reference region.

Here, E<sub>ij</sub>, E<sub>in</sub>, and E<sub>n</sub> represent the production of sector i in the study area, reference area, and overall reference area, respectively.

Explanation :

E<sub>in</sub> = added value of sector i in the reference area

E<sub>ij</sub> = added value of sector i in study area j

Klassen Type Classification is a study that aims to identify the structure and growth patterns of economic sectors in a region. In addition, the results of this analysis are useful for projecting the potential for economic growth in the region in the future, and also serve as a basis for evaluation in formulating government strategies and policies.

The typology resulting from this analysis is divided into four quadrants, each of which has characteristics, namely (Wijaya et al., 2020):

1. "Quadrant I or Advanced and Rapidly Growing Sectors": The first quadrant describes sectors in DIY that are not only advanced but also experiencing rapid growth. This is a category where the business sector in DIY shows growth and contribution that tends to be greater than the same category at the national level.
2. "Quadrant II or Developed Sectors but Growth is Suppressed": The second quadrant characterizes sectors in DIY that have a smaller growth rate but provide a greater value contribution when compared to the growth and contribution of the same category at the national level.
3. "Quadrant III or Potential Sectors and Can Still Develop": The third quadrant includes sectors in DIY that experience greater growth but provide a smaller contribution value when compared to the growth and contribution of the same category at the national level.

4. "Quadrant IV or Not a Potential and Underdeveloped Sector": The fourth quadrant is a category where business fields in DIY show growth and contribution which tends to be smaller when compared to the growth and contribution of the same category at the national level.

In analyzing the potential of economic sectors, the Growth Ratio Model (MRP) is used as an analytical tool, which is a development of the Shift-Share model. This analysis involves comparing the real value and nominal value resulting from the two comparisons. The data used in the research includes the economic growth rate of Katingan Regency and Central Kalimantan Province during the 2018-2022 period. To obtain an in-depth description of economic activities, including growth criteria and contribution, as well as assessing whether the sector has an economic structure that has the potential to be developed in Central Kalimantan Province, Overlay analysis is applied. This analysis is a combination of the study area growth ratio (RPs) from the Growth Ratio Model (MRP) and the average Location Quotient (LQ) during the research period. The formula for RPs is as follows:

$$RPS = \frac{\Delta E_{ij}/E_{ij(t)}}{\Delta E_{IR}/E_{IR(t)}}$$

Information :

- Eir(t) = Central Kalimantan GDP in sector i in the initial year of the research period  
 $\Delta E_{ir}$  = Change in GDP of Central Kalimantan Province in sector i in the year of analysis  
 RPs = Katingan Regency Growth Ratio  
 Eij(t) = GRDP of Katingan Province in sector i in the initial year of the research period  
 $\Delta E_{ij}$  = Change in GDP of Katingan Regency in sector i in the year of analysis

#### 4. RESULT AND DISCUSSIONS

To determine whether the sector is superior or not, Location Quotient (LQ) analysis is used, namely by comparing a region with the region above it. In this case, the Katingan Regency area is used compared to the Central Kalimantan area. Location Quotient (LQ) analysis according to its formula is quite simple, and if applied in one analysis, its benefits may be limited to assessing  $LQ > 1$  or  $LQ < 1$ . However, the potential of LQ analysis can be more interesting when carried out in the form of a time series or trends, namely by analyzing data for certain time periods. In this context, GDP data for Katingan Regency and Central Kalimantan Province is used for the 2018 - 2022 time period.

Table 1. Location Quotient (LQ) Calculation Results for Katingan Regency 2018-2022

No	Sector	Average	LQ Description
1	Agriculture, Forestry and Fisheries	1,20	Base
2	Mining and excavation	0,49	Non Base
3	Processing industry	0,65	Non Base
4	Procurement of Electricity and Gas	0,46	Non Base
5	Water Supply, Waste Management, Waste and Recycling	0,66	Non Base
6	Construction	1,39	Base
7	Wholesale and Retail Trade; Car and Motorcycle Repair	0,70	Non Base
8	Transportation and Warehousing	1,18	Base
9	Provision of accommodation and food and drink	1,29	Base
10	Information and Communication	0,66	Non Base
11	Financial Services and Insurance	0,49	Non Base
12	Real Estate	1,31	Base
13	Company Services	0,51	Non Base
14	Government Administration, Defense, and Mandatory Social Security	1,10	Base
15	Education Services	1,19	Base
16	Health Services and Social Activities	1,42	Base
17	Other Services	3,27	Base

Data source: Central Kalimantan BPS (2022) (processed data)

From the data listed in the table above, it can be concluded that Katingan Regency's Gross Regional Product (GRDP) involves 17 economic sectors. In this context, there are 9 sectors that have a Location Quotient (LQ) of more than 1, indicating that there is superiority in this sector and is the basis of the economy in Katingan Regency. The nine leading sectors include agriculture, forestry and fisheries; construction; social activity and health services; education; social Security; defense; government administration; real estate; drinks and food; accommodation; trading; transportation; and similar services.

These nine sectors have the capacity to meet market needs, both inside and outside Katingan Regency. On the other hand, there are 8 other sectors that have not been able to meet the needs of the domestic market in Katingan Regency. These sectors involve mining and quarrying, corporate services, insurance and financial services, communications and information, retail and large trade including motorbike and car repairs, recycling,

and waste and waste processing systems, as well as the provision of water, electricity and gas, to the processing industry.

After carrying out the Location Quotient (LQ) analysis, the next step is to carry out the MRP (Growth Ratio Model) analysis. The aim of analyzing MRP is to gain an understanding of the comparison of sector growth rates in Katingan Regency and Central Kalimantan Province. Within the framework of the Growth Ratio Model, there are two main ratios, namely RPs (Study Area Growth Ratio) and RPr (Reference Area Growth Ratio). The study area is Central Kalimantan, while Indonesia acts as a reference area. MRP (Growth Ratio Model) is classified as an analysis model adapted from shit share. MRP produces a coefficient number as a representation of growth, which is then classified as positive (+) or negative (-) growth. If the RPr or RPs value is  $> 1$ , then the RPr and RPs are considered nominally positive (+). Conversely, if the value of RPr or RPs  $< 1$ , then RPr and RPs are considered nominally negative (-). The findings from the Growth Ratio Model analysis can be accessed through the table presented below.

Table 2. MRP Calculation Results for Central Kalimantan Province and Katingan Regency 2018-2022

No	Sector	MRP			
		RPr	N	RPs	N
1	Agriculture, Forestry and Fisheries	0,86	-	2,32	+
2	Mining and excavation	0,95	-	-1,91	-
3	Processing industry	2,79	+	3,47	+
4	Procurement of Electricity and Gas	1,56	+	2,47	+
5	Water Supply, Waste Management, Waste and Recycling	0,69	-	3,09	+
6	Construction	1,04	+	2,00	+
7	Wholesale and Retail Trade; Car and Motorcycle Repair	1,13	+	1,99	+
8	Transportation and Warehousing	0,96	-	3,08	+
9	Provision of accommodation and food and drink	2,55	+	77,18	+
10	Information and Communication	1,69	+	5,28	+
11	Financial Services and Insurance	0,67	-	3,82	+
12	Real Estate	0,23	-	1,22	+
13	Company Services	0,77	-	1,12	+
14	Government Administration, Defense, and Mandatory Social Security	1,10	+	1,16	+
15	Education Services	2,40	+	2,65	+
16	Health Services and Social Activities	0,26	-	3,89	+
17	Other Services	0,26	-	1,27	+

Source: Central Kalimantan BPS (2022) (data processed)

To combine the output from RPr and RPs, a description of the main economic sectors in Katingan Regency can be described through four classification categories (Zakiah et al., 2023: 213).

1. Classification 1, is the value of RPr (+) and RPs (+) meaning that the activity is superior in the reference area and in the study area and has prominent growth. By looking at table 4.6, the sectors are processing industry, electricity and gas procurement, construction, wholesale and retail trade; repair of cars and motorbikes, provision of accommodation, and administration of government, defense and mandatory social security
2. Classification 2, is when RPr (+) and RPs (-) indicate that an activity generates significant growth in the reference area, but is not yet prominent in the study area. By referring to table 4.6, it can be concluded that there is no sector that can be categorized into classification 2 according to these conditions.
3. Classification 3, is when RPr (-) and RPs (+) indicate that an activity is not prominent in the growth reference area, but is prominent in the growth study area. Referring to table 4.6, sectors that meet classification criteria 3 include social activity and health services; education; social Security; defense; government administration; real estate; drinks and food; accommodation; trading; transportation; and similar services.
2. Classification 4 occurs when RPr (-) and RPs (-), indicating that the growth of economic activity in the reference area and study area is not striking.

Based on information from table 2, it can be concluded that the sectors accepted for this classification are the mining and quarrying sectors.

Overlay analysis in this context is used to evaluate the potential for economic activity in a region by utilizing the criteria of growth and comparative advantage. This analysis includes a comparison between the Study Area Growth Ratio (RPs) value and the Location Quotient (LQ) value. Meanwhile, it is stated that the main difference between Overlay Analysis and Growth Ratio Model (MRP) lies in the analysis results (Supriadi, 2022).

Table 3. Overlay Calculation Results for Katingan Regency, 2018-2022

No	Sector	Katingan Regency		
		LQ	MRP	Total
1	Agriculture, Forestry and Fisheries	+	+	++
2	Mining and excavation	-	-	--
3	Processing industry	-	+	-+
4	Procurement of Electricity and Gas	-	+	-+
5	Water Supply, Waste Management, Waste and Recycling	-	+	-+
6	Construction	+	+	++
7	Wholesale and Retail Trade; Car and Motorcycle Repair	-	+	-+
8	Transportation and Warehousing	+	+	++
9	Provision of accommodation and food and drink	+	+	++
10	Information and Communication	-	+	-+
11	Financial Services and Insurance	-	+	-+
12	Real Estate	+	+	++
13	Company Services	-	+	-+
14	Government Administration, Defense, and Mandatory Social Security	+	+	++
15	Education Services	+	+	++
16	Health Services and Social Activities	+	+	++
17	Other Services	+	+	++

Based on the table of calculation results of the overlay analysis of Katingan Regency, we obtain a description of economic activities in Katingan Regency as follows:

1. Sectors that stand out (dominant) in terms of growth and contribution are marked with ++, namely the agriculture, forestry and fisheries sectors, construction, transportation and warehousing, provision of accommodation and food and drink, real estate, defense government administration and mandatory social security, educational services, health services and social activities, and other services
2. Sectors with prominent growth but small contributions are marked with -+, namely the processing industry sector, electricity and gas procurement, information and communications, financial and insurance services, and corporate services
3. No sector whose growth is not outstanding but whose contribution is large
4. Sectors whose growth is not prominent and whose contribution is small are characterized by - namely the mining and quarrying sector

The Klassen typology is used to categorize regions based on a combination of economic growth and income. From the results of this analysis, four characteristics of economic patterns and structures and different economic contributions were obtained, namely as follows: (fast developed and fast growing regions, developed but depressed regions, fast developing regions, and relatively underdeveloped regions (Bahasaoan et al., 2022). To see the results of the Klassen Typology analysis, you can see the table below:

Table 4. Results of Katingan Regency Class Typology Analysis 2018-2022

Sector	Quadratic	Description
Agriculture, Forestry and Fisheries	1	The sector is advanced and growing rapidly
Mining and excavation	4	The sector is relatively underdeveloped
Processing industry	1	The sector is advanced and growing rapidly
Procurement of Electricity and Gas	4	The sector is relatively underdeveloped
Water Supply, Waste Management, Waste and Recycling	2	The sector has potential or can still develop rapidly
Construction	1	The sector is advanced and growing rapidly
Wholesale and Retail Trade; Car and Motorcycle Repair	2	The sector has potential or can still develop rapidly
Transportation and Warehousing	1	The sector is advanced and growing rapidly
Provision of accommodation and food and drink	1	sector is advanced and growing rapidly
Information and Communication	2	potential sector or can still develop rapidly
Financial Services and Insurance	2	potential sector or can still develop rapidly
Real Estate	1	The sector is advanced and growing rapidly
Company Services	2	The sector has potential or can still develop rapidly
Government Administration, Defense, and Mandatory Social Security	1	sector is advanced and growing rapidly
Education Services	1	sector is advanced and growing rapidly
Health Services and Social Activities	1	sector is advanced and growing rapidly

Other Services 1 sector is advanced and growing rapidly

Shift-Share Analysis is an economic analysis method used to understand and identify the contribution of certain economic sectors to the economic growth of a region. This method helps in analyzing and understanding what factors cause changes in output or employment in an area over a certain period of time (Sugiarto & Ramadania, 2023). The following table calculates the Shift Share analysis for Katingan Regency

Table 5. Calculation results of Shift Share analysis for Katingan Regency 2018-2022

No	Sector	Nij	Mij	Cij	Dij
1	Agriculture, Forestry and Fisheries	99.234,67	159,17	395.545,93	694.939,77
2	Mining and excavation	86.899,82	11.839,83	253.307,62	178.247,63
3	Processing industry	169.959,08	8.758,58	420.159,32	581.359,82
4	Procurement of Electricity and Gas	334,20	598,07	491,30	1.423,57
5	Water Supply, Waste Management, Waste and Recycling	509,03	286,50	1.064,17	1.859,70
6	Construction	147.068,53	45.950,42	147.058,67	248.176,78
7	Wholesale and Retail Trade; Car and Motorcycle Repair	89.403,43	3.469,15	88.453,07	181.325,65
8	Transportation and Warehousing	86.311,59	11.185,06	179.563,41	277.060,06
9	Provision of accommodation and food and drink	2.636,40	99,36	200.851,10	203.388,14
10	Information and Communication	8.134,60	12.583,42	34.804,30	55.522,32
11	Financial Services and Insurance	12.612,18	8.707,59	35.509,92	56.829,69
12	Real Estate	33.579,33	-11.085,31	7.525,77	30.019,79
13	Company Services	169,16	129,78	19,64	59,02
14	Government Administration, Defense, and Mandatory Social Security	79.450,21	-18.658,22	12.477,49	73.269,48
15	Education Services	60.936,89	5.808,46	100.366,11	167.111,46
16	Health Services and Social Activities	30.076,54	42.201,69	86.905,66	159.183,89
17	Other Services	25.225,34	-18.641,21	6.810,26	13.394,39
TOTAL		1.132.540,98	-30.163,59	1.464.298,52	2.566.675,91

Source: Central Kalimantan BPS (2022) (data processed)

From the table listed above, it can be seen that during the 2018-2022 period, the Katingan Regency economy experienced an increase of IDR 2,566,675.91. This economic increase was the result of several factors, including economic growth in Central Kalimantan Province, industrial mix dynamics, and competitive advantages. For more complete details, these factors can be described as follows:

1. Influence of Indonesian Economic Growth (Nij)

The influence of the economic growth of Central Kalimantan Province (Nij) on the economic growth of Katingan Regency provided a positive contribution of IDR 1,132,540.98. If we look at the sectoral economic growth of Katingan Regency compared to the relative growth rate of the same economic sectors at the provincial level, it shows that on average the economic sector at the provincial level is relatively higher than the sector at the national level.

2. Influence of Industrial Mix (Mij)

The influence of the industrial mix (Mij) on the economy in Katingan Regency contributed a positive contribution of IDR 30,163.59. When looking at the output produced, the industrial mix has both good and bad impacts on most economic sectors. A positive value indicates growth that is faster than overall economic growth, while a negative value indicates growth that is slower than overall economic growth.

3. Influence of competitive advantage (Cij)

The influence of Competitive Advantage (Cij) in each economic sector has increased, with a positive figure reaching IDR 1,464,298.52. Sectors that show a good level of competitiveness include corporate services, fisheries, forestry, agriculture, insurance and financial services, communications and information, retail and large trade including motorbike and car repairs, recycling and waste and waste processing systems, as well as water supply, electricity and gas, to the processing industry. On the other hand, the mining and quarrying sector experienced a competitive decline.

## 5. CONCLUSIONS

Development involves the development of social organization and the functioning of society. Apart from fighting income inequality and alleviating poverty, we also strive to accelerate economic growth. The role of planning is the key to the success of the economic development process. Therefore, it is important for regions to identify and analyze economic potential and indicators and select existing potential sectors.



From the data analysis in the table above, it can be seen that Katingan Regency has 17 economic sectors in Gross Regional Product (GRDP). A total of 9 sectors have a Location Quotient (LQ) of more than 1, which indicates that these sectors are superior sectors or the main economic base in Katingan Regency. The nine leading sectors include agriculture, forestry and fisheries, construction, social activity services and health; education; social Security; defense; government administration; real estate; drinks and food; accommodation; trading; transportation; and similar services.

These nine sectors are able to meet the needs of the internal and external markets of Katingan Regency. On the other hand, there are eight other sectors whose LQ is less than 1, which include mining and quarrying, processing industry, electricity and gas, water, waste management, waste and recycling, wholesale and retail trade: Car and motorbike repair, information and communication, financial and insurance services, and corporate services. In the 2018-2022 period, Katingan Regency experienced an increase of IDR 2,566,675.91. The growth of the economy in Katingan Regency is due to the factors of Economic Growth, the Influence of Industrial Composition, and the Influence of Competitive Advantage in Central Kalimantan.

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