Journal of International Conference Proceedings (JICP) Vol. 6 No. 6, pp. 316-330, December, 2023
P-ISSN: 2622-0989/E-ISSN: 2621-993X
https://www.ejournal.aibpmjournals.com/index.php/JICP

Analysis of Structural Changes and Leading Sectors in West Tanjung Jabung Regency

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ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Situmorang, D. Y. & Udjianto, D. W. (2023). Analysis of Structural Changes and Leading Sectors in West Tanjung Jabung Regency. *Journal of International Conference Proceedings*, *6*(6), 316-330.

DOI:
https://doi.org/10.32535/jicp.v6i6.2770

Received: 07 October 2023
Accepted: 06 November 2023
Published: 04 December 2023

ABSTRACT

This study aims to determine the leading sectors and potential sectors to be developed and analyze structural changes in West Tanjung Jabung Regency. This research methods are Location Quotient (LQ) and Shift Share Analysis. The data in this study are secondary data in the form of time series data from the Gross Regional Domestic Product (GRDP) of West Tanjung Jabung Regency and Jambi Province obtained from the Central Bureau of Statistics. The researcher found that structural changes occurred in West Tanjung Jabung Regency. This transformation is characterized by the development of the distribution of the industrial sector and services to the GRDP. The results of the Location Quotient (LQ) and Shift Share analysis show that the mining and quarrying sector (B), the manufacturing sector (C) and the company services sector (M, N) are potential basic or leading sectors to be developed in West Tanjung Jabung District. Other sectors that are mainstay sectors such as the agriculture, forestry, and fisheries sector (A), the electricity and gas procurement sector (D), the construction sector (F) and the information and communication sector (J) do not rule out the possibility of being developed into leading sectors because they have competitive advantages and fast growth.

Keywords: Location Quotient (LQ), Leading Sector, Structural Change, Shift Share

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INTRODUCTION

One of the sectors that has the largest contribution in the economy of developing countries such as Indonesia is contributed by the agricultural sector (Ibrahim & Mazwan, 2020) and is the sector that absorbs the most labor (Byerlee et al., 2009; Briones & Felipe, 2013). The average distribution of the agriculture, forestry & fisheries sector to Indonesia's Gross Domestic Product (GRDP) in 2010-2020 was 13.35% below the contribution of the manufacturing sector, which was 20.76% (BPS, 2023). Although these two sectors have dominant contributions, the contribution of both sectors has decreased from year to year as shown in Table 1. This also indicates that Indonesia has experienced structural changes over time where labour from the agricultural sector began to move to the non-agricultural sector.

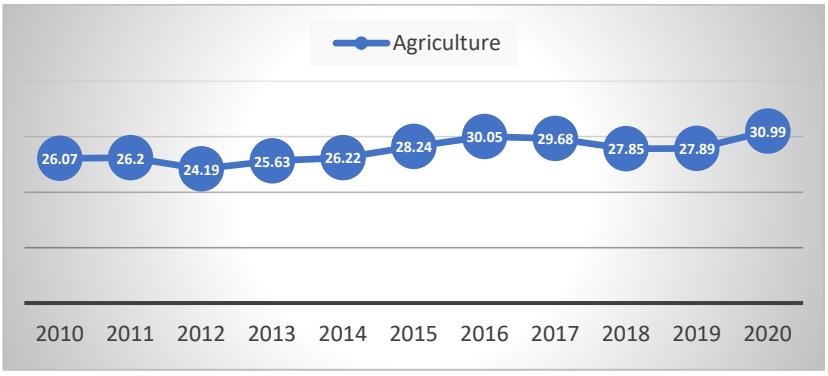
Table 1. Distribution of Agriculture and Industry Sector to GDP in Indonesia 2010-2020

Year/Sector	Agriculture, Forestry and Fisheries	Processing Industry	Year/Sector	Agriculture, Forestry and Fisheries	Processing Industry
2010	13,93	22,04	2016	13,48	20,52
2011	13,51	21,76	2017	13,16	20,16
2012	13,37	21,45	2018	12,81	19,86
2013	13,36	21,03	2019	12,71	19,70
2014	13,34	21,08	2020	13,70	19,87
2015	13,49	20,99	Average	13,35	20,76

Source: BPS (2023).

The agricultural sector also dominates its contribution to the economy of one of the Jambi province regencies in Indonesia, namely West Tanjung Jabung regency. The contribution of the agricultural sector during 2010-2020 even reached 30.99% to GRDP. This is different from what happened in previous data in Indonesia. The contribution of the agricultural sector in West Tanjung Jabung regency has an increasing trend. Its development can be seen in Figure 1.

Figure 1. Development of Agricultural Sector Contribution to GRDP of West Tanjung Jabung Regency in 2010-2020



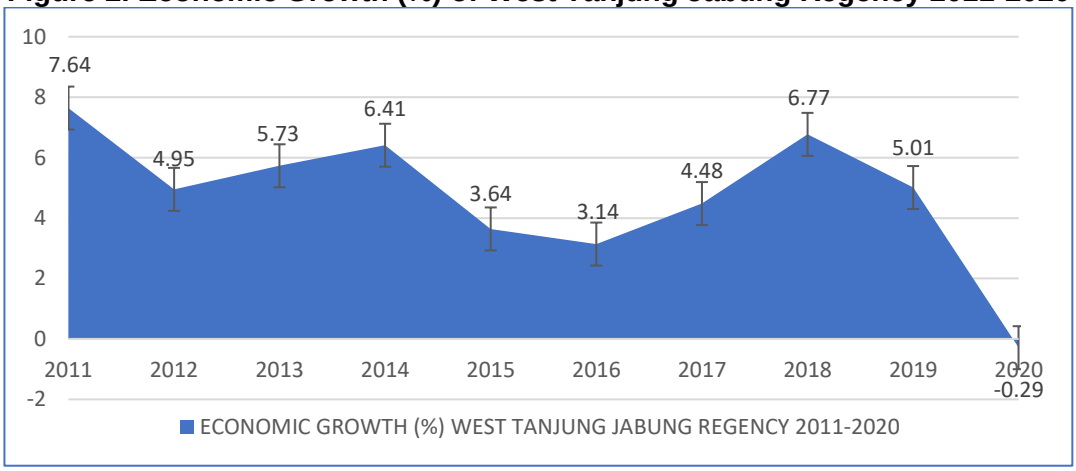
Source: BPS (processed data).

In the process of economic development, it will usually be followed by structural changes in the economy, such as changes in domestic demand, production structure and trade structure. Economic development is said to be successful if the role of the manufacturing sector continues to increase, both in the production structure or in Gross Domestic Product and in the export structure (Syahputra et al., 2015).

Todaro and Smith (2006) explain that economic growth that coincides with structural change can be achieved by increasing the productivity of each sector and mobilizing labor from sectors that have low productivity to other sectors with high productivity. Because with increased productivity, it is expected that wages will also increase as well as workers' welfare can be improved. These structural changes in the economy also have an indirect impact on economic change and labor absorption (Syahputra et al., 2015).

West Tanjung Jabung is one of the districts of Jambi province in Indonesia. Judging from its economic growth, West Tanjung Jabung regency has fluctuating economic growth but have a downward trend during 2011-2020. This is shown in Figure 2.

Figure 2. Economic Growth (%) of West Tanjung Jabung Regency 2011-2020



Source: BPS (processed data).

As a region that is in a state of development and continues to develop, West Tanjung Jabung regency also relies on natural resources (agriculture, forestry and fisheries sectors) as part of the largest source of income for the region, the lack of skilled human resources, limited capital and the variety of potential resources owned are obstacles that become obstacles in the development of economic growth in West Tanjung Jabung regency.

Suyatno (2000) in Basuki and Mujiraharjo (2017) explains that when a region is able to export in a sector or is able to win competition in the same sector as other regions, the region can be said to have a leading sector. Likewise, Adisasmita (2005) said that the greater the export of a region to other regions, the more advanced the growth of the region, and vice versa. Any changes that occur in the basic sector will cause a multiplier effect in the regional economy.

Based on these problems, a study is needed to look at the process of structural change and see the potential and advantages that are owned so that they can be developed and become a source of welfare for the regional community in West Tanjung Jabung regency.

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LITERATURE REVIEW

Structural Change Theory

Todaro and Smith (2011) said that structural change focuses on the mechanisms by which developing countries change the structure of their domestic economies from one that heavily emphasizes traditional subsistence agriculture to a more modern, urban-oriented economy with a diverse range of manufacturing and service industries.

Structural Transformation

Structural transformation is the process of transforming the economy in such a way that the contribution of the manufacturing sector to national income eventually surpasses that of the agricultural sector (Todaro & Smith, 2011).

Leading Sector

A leading sector is defined as a sector where exogenous growth can be triggered that will induce higher sectoral growth rates across the economy, corresponding to varying income elasticities of demand, and thus trigger higher aggregate growth rates (Currie, 1974).

Typology Klassen

Klassen typology is a typology used to determine the utilization pattern and economic structure of a region studied in Regional and Urban Economics. Klassen typology can be used to identify priority or leading sectors, subsectors, businesses, or commodities in a region. This analytical tool can also be used to determine an overview of the pattern and structure of economic growth in a region (Khusnaini, 2022).

Gross Regional Domestic Product (GRDP)

BPS Kabupaten Magelang (2017) said in general, GRDP can be interpreted as the entire gross production value of goods and services produced by all factors of production in a particular area/region and calculated in a certain period (usually one year).

Empirical Studies

Several studies related to the topic of structural change basically produce similar conclusions. Research on structural change such as that conducted by Ibrahim and Mazwan (2020) in East Java and Syahputra et al. (2015) in West Aceh Regency found that structural change had occurred where labor from the agricultural sector moved to the non-agricultural sector. UNIDO (2012) explains that structural change is a change in the structure of the economy from traditional sectors (low productivity) to economic sectors with higher productivity. Todaro and Smith (2011) also explained that the structural change model focuses on the mechanisms that enable developing countries to transform the structure of their economies from traditional subsistence agricultural economic patterns to more modern economies.

Another important aspect of structural transformation is also found, namely in terms of employment. Transformation can be achieved through increasing labor productivity in each sector as well as transferring labor from sectors with low labor productivity to sectors with higher labor productivity. Some studies related to transformation from the labor side are conducted by Hur et al. (2002), Gropello and Sakellariou (2010), Lee and Wie (2013), Graetz and Michaels (2015), Acemoglu and Restrepo (2020) and Lim and Han (2018).

Structural changes in the economy have an impact on improving other interrelated economic sectors. An area can be said to be developed if it is supported in terms of high public knowledge, the existence of adequate natural resources managed by human resources that have great potential to achieve the progress of regional development (Syahputra et al., 2015).

Many studies use shift share analysis. Shift share analysis is complemented by Location Quotient (LQ) analysis so that changes and shifts in economic sectors can be known through this analysis (Arsyad, 1999). Some studies that use shift share analysis for their research include, for example, research by Rachmawati et al. (2020) with the research title Shift Share Analysis of Indonesia during the Covid-19 pandemic, where the results showed that the Covid-19 pandemic had an impact on sectoral shifts in Indonesia, especially in the province that was the object of research.

Basuki and Mujiraharjo (2017) with the research title Leading Sector Analysis of Sleman Regency with the Shift Share and Location Quotient Methods. The results found that in Sleman Regency there are four leading sectors, namely the construction sector, transportation and warehousing sector, real estate sector, and corporate services sector. It is also known that there are five lagging sectors, namely the agriculture, forestry and fisheries sector, the mining and quarrying sector, the electricity and gas procurement sector, the wholesale and retail trade sector: repair of cars and motorbikes, the government administration sector, defense and mandatory social security.

Suryani (2019) in her research entitled Location Quotient (LQ) Analysis and Post-Natural Disaster Shift Share in Central Java province found that the leading and potentially superior sectors to be developed in Central Java province after natural disasters are the wholesale and retail trade sector, repair of cars and motorbikes, provision of food and beverage accommodation, and educational services.

Abidin (2015) with the title research Application of Shift Share Analysis on Agricultural Sector Transformation in the Regional Economy in Southeast Sulawesi, where in the study obtained the results that shift share analysis on agricultural transformation in Southeast Sulawesi shows a good picture of the shift and role of the agricultural sector in regional economic growth (GRDP). The economic sector in Southeast Sulawesi is positively influenced by national growth. Although the growth of the agricultural sector is relatively slow, the sector has a competitive advantage. In addition, from the results of the study it was also found that the agricultural sector has a specialization allocation effect, a strong linkage value with other sectors, and has a positive impact on other sectors, and is also a leverage in output growth in the region.

Sinaga (2023) with the title of his research on Analysis of the Agricultural Potential of Papua Province. His research uses LQ and shift share analysis tools to see the agricultural potential that exists in each district / city in Papua Province. The results of this study found that all sectors have positive shift share values. This indicates that in Papua Province all sectors in the district / city have progressive growth and there is potential to be developed. The results of the LQ analysis found that in Papua province there are 27 districts/cities whose agricultural sector is a basic sector or agricultural surplus. While the districts/cities that are included in the non-base sector are Mimika regency and Jayapura city.

Then Shi et al. (2007), Mondal (2009), Tumangkeng (2018), Mukhlis, et al. (2018), Adi (2017), Khusaini (2015), Tseng (2014), Wati and Arifin (2019), and Amri et al. (2023) in their studies they also use shift share analysis to see what sectors are potential or which sectors are able to compete.

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RESEARCH METHOD

Data and Data Source

This study aims to analyze the structural transformation of the economy in West Tanjung Jabung regency, Jambi province, where the aspects analyzed include economic sector variables in the gross regional domestic product (GRDP) (17 sectors). Details of the 17 GRDP sector variables used in this study are summarized in Table 2. The data used in this study are time series for the period 2010-2020 based on constant 2010 prices obtained through the BPS Provinsi Jambi (2023).

Table 2. Sectors of GRDP

PDRB Sector	Description	PDRB Sector	Description
A	Agriculture, Forestry and Fisheries	J	Information and Communication
B	Mining and Quarrying	K	Financial and Insurance Services
C	Manufacturing Industry	L	Real Estate
D	Electricity and Gas Procurement	M, N	Company Services
E	Water Supply, Waste Management, Waste and Recycling	O	Government Administration, Defense and Compulsory Social Security
F	Construction	P	Education Services
G	Wholesale and Retail Trade; Repair of Cars and Motorcycles	Q	Health and Social Services
H	Transportation and Warehousing	R, S, T, U	Other services
I	Provision of Accommodation and Drinking Meals		

Source: BPS.

Analysis Tools

This research uses the Location Quotient (LQ) method approach to see the base sector and Shift-Share Analysis to see the potential of the GRDP sectors of West Tanjung Jabung regency. Then using Typology Klassen Analysis to see the GDRP sectors are in the leading sector, mainstay sector, prospective sector, or lagging sector.

Location Quotient (LQ)

The base sector has a significant influence on regional economic growth. The base sector can be determined by Location Quotient (LQ) analysis. The formulation of Location Quotient (LQ) used in determining the base and non-base sectors is expressed in the following equation (Arsyad, 1999).

$$LQ = \frac{S_{iR}/S_R}{S_{iN}/S_N} \quad (1)$$

Which is:
S_{iR} : Total GRDP of sector i in West Tanjung Jabung regency;
S_R : Total amount of GRDP in West Tanjung Jabung regency;
S_{iN} : Total GRDP of sector i in Jambi province;
S_N : Total amount of GRDP in Jambi province.

Criteria, if:
LQ > 1 = Base sector;
LQ = 1 = Sector only fulfilled the region itself;
LQ < 1 = Sector does not sufficiently fulfill the region itself.

Analysis Shift-Share
Shift-Share analysis consists of three components of analysis: national growth effect, sectoral growth, and differential shift or competitiveness. The general form of the shift-share analysis equation can be written as follows (Tarigan, 2014).

$$Dij = Nij + Mij + Cij \quad (2)$$

The following is the formula to find the value of national growth (Nij), sectoral growth (Mij) and competitiveness (Cij):

$$N_{ij} = Y_{ij} * r_n \quad (3)$$
$$M_{ij} = Y_{ij}(r_{in} - r_n) \quad (4)$$
$$C_{ij} = Y_{ij}(r_{ij} - r_{in}) \quad (5)$$

Where:
Y_{ij} = GRDP of sector i of region j (West Tanjung Jabung regency);
r_{ij} = change in sector i of region j (West Tanjung Jabung regency);
r_{in} = sector i change in Supra region (Jambi province);
r_n = national change in base year.

Klassen Typology Analysis
Klassen typology is an analytical tool that can be used to identify sectors in the region that are in the leading, mainstay, prospective or lagging sectors (Tarigan, 2004). Klassen Typology criteria are divided into four clusters as follows.

Table 3. Klassen Typology Analysis Criteria

Criteria	LQ > 1	LQ < 1
$\boldsymbol{D_{ij} > 0}$	(I) Leading Sector	(II) Mainstay Sector
$\boldsymbol{D_{ij} < 0}$	(III) Prospective Sector	(IV) Lagging Sector

Source: Tarigan (2004).

When the value of LQ > 1 and Dij > 1, it means that the sector is a leading sector. If the value of LQ < 1 and Dij > 1, the sector is a mainstay sector. If the value of LQ > 1 and Dij < 1, the sector is a prospective sector. If the value of LQ < 1 and Dij < 1, the sector is a lagging sector.

RESULTS

Distribution of GRDP Sectors to GRDP
The following is data on the distribution of all GRDP sectors to GRDP in 2010 and 2020 to see whether structural change has occurred in West Tanjung Jabung. This can be seen through the shift or increase in the industry and services sectors.

Table 4. Distribution of GRDP Sectors to GRDP

GRDP Sector	2010	2020	GRDP Sector	2010	2020
A	26.07	30.99	J	3.26	4.46
B	26.77	12.28	K	1.97	2.63
C	11.43	10.73	L	1.59	1.74
D	0.04	0.07	M, N	1.2	1.26
E	0.16	0.15	O	3.56	4.85
F	5.88	8	P	3.56	3.88
G	8.47	12.62	Q	1	1.37
H	3.02	2.75	R, S, T, U	1.08	1.02
I	0.94	1.19			

Source: BPS.

Calculation of Location Quotient (LQ)

From the Location Quotient (LQ) calculation, the following results were obtained. We can see how many and what are the basic and non-basic sectors in West Tanjung Jabung regency.

Table 5. Location Quotient (LQ) Calculation Results

GRDP Sector	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Desc.
A	0,74	0,75	0,77	0,79	0,80	0,81	0,83	0,83	0,83	0,83	0,83	Non-Base
B	1,69	1,64	1,64	1,64	1,68	1,72	1,74	1,74	1,76	1,79	1,80	Base
C	1,81	1,80	1,79	1,81	1,76	1,77	1,78	1,78	1,74	1,71	1,72	Base
D	0,24	0,24	0,24	0,25	0,25	0,25	0,26	0,27	0,26	0,26	0,26	Non-Base
E	0,39	0,39	0,39	0,40	0,39	0,39	0,40	0,40	0,39	0,39	0,39	Non-Base
F	0,46	0,46	0,48	0,49	0,53	0,55	0,59	0,61	0,61	0,61	0,61	Non-Base
G	0,32	0,31	0,32	0,33	0,32	0,32	0,33	0,33	0,33	0,33	0,32	Non-Base
H	0,24	0,23	0,23	0,23	0,23	0,24	0,23	0,24	0,23	0,23	0,26	Non-Base
I	0,40	0,40	0,40	0,39	0,38	0,37	0,37	0,37	0,37	0,37	0,37	Non-Base
J	0,42	0,42	0,45	0,45	0,45	0,45	0,45	0,46	0,45	0,46	0,45	Non-Base
K	0,45	0,44	0,45	0,44	0,44	0,45	0,44	0,44	0,44	0,44	0,43	Non-Base
L	0,39	0,38	0,39	0,41	0,41	0,42	0,43	0,44	0,44	0,44	0,43	Non-Base
M, N	1,01	1,02	1,04	1,05	1,03	1,01	1,03	1,04	1,03	1,02	1,02	Base
O	0,38	0,38	0,39	0,40	0,40	0,41	0,43	0,43	0,43	0,43	0,44	Non-Base
P	0,53	0,54	0,53	0,53	0,54	0,52	0,53	0,53	0,52	0,52	0,51	Non-Base
Q	0,39	0,39	0,37	0,38	0,37	0,39	0,39	0,40	0,39	0,39	0,38	Non-Base
R, S, T, U	0,53	0,52	0,53	0,53	0,54	0,54	0,54	0,54	0,52	0,52	0,51	Non-Base

Source: Data processed, 2023.

Calculation of Shift Share

The results of the shift share calculation are shown below. Then we can see the value of national growth (Nij), sectoral growth (Mij) and competitiveness (Cij) to find out how the development of each sector between the region and the province.

Table 6. Shift Share Calculation Results

PDRB Sector	rij	rin	rn	National Grw	Sectoral Grw	Competitiveness	SS	Average of LQ
				Nij	Mij	Cij	Dij	
A	0,82	0,68	0,64	2373,21	168,85	525,33	3067,39	0,80
B	0,49	0,44	0,64	5565,46	-1699,88	387,27	4252,85	1,71
C	0,38	0,50	0,64	2547,83	-557,14	-488,92	1501,77	1,77
D	1,24	1,11	0,64	1,24	0,93	0,25	2,42	0,25
E	0,34	0,40	0,64	7,73	-2,90	-0,75	4,08	0,39
F	1,69	1,09	0,64	330,16	235,68	309,55	875,38	0,55
G	0,79	0,85	0,64	332,72	111,15	-29,91	413,95	0,32
H	0,63	0,53	0,64	87,61	-14,22	13,10	86,49	0,24
I	0,66	0,87	0,64	45,84	16,45	-14,67	47,61	0,38
J	1,17	1,07	0,64	166,93	112,71	27,26	306,91	0,45
K	0,82	0,95	0,64	108,44	53,32	-22,63	139,13	0,44
L	0,67	0,53	0,64	75,78	-12,27	15,89	79,40	0,42
M, N	0,33	0,36	0,64	149,27	-64,06	-8,55	76,66	1,03
O	0,69	0,49	0,64	165,07	-36,82	49,92	178,16	0,41
P	0,49	0,60	0,64	233,03	-14,46	-39,52	179,05	0,53
Q	1,01	1,12	0,64	48,00	36,20	-8,39	75,81	0,39
R, S, T, U,	0,44	0,54	0,64	70,43	-10,21	-11,88	48,34	0,53

Source: Data processed, 2023.

DISCUSSION

Structural Change

Table 4 shows that the agriculture, forestry, and fisheries sector (A) still dominates its distribution to the GRDP of West Tanjung Jabung regency. We can also see that other sectors are growing, such as the electricity and gas procurement sector (D), the construction sector (F), the wholesale and retail trade sector; repair of cars and motorcycles (G), the provision of accommodation and eating and drinking (I), the information and communication sector (J), the financial and insurance services sector (K), the real estate sector (L), the corporate services sector (M,N), the government administration, defense and mandatory social security sector (O), the education services sector (P) and the health services and social activities sector (Q). This shows that in West Tanjung Jabung regency there has been a structural transformation from the agricultural sector to the industrial and services sectors.

The contribution of the agricultural sector still appears to dominate, but structural changes have begun to occur in West Tanjung Jabung regency through the growth of the industrial and services sectors which increased until 2020. Similarly, Todaro & Smith (2011) argue that developing countries are changing the structure of the domestic economy from one that heavily emphasizes traditional subsistence agriculture to a more modern, urban-oriented economy with diverse manufacturing and service industries.

Location Quotient (LQ) Analysis

Table 5, which is the result of the LQ calculation, shows that in West Tanjung Jabung regency there are three GRDP sectors that have an LQ value > 1 or are base sectors, namely sectors B (Mining and Quarrying), C (Manufacturing Industry) and M, N (Corporate Services). Meanwhile, the other 14 sectors, namely the agriculture, forestry and fisheries sector (A), the electricity and gas supply sector (D), the water supply sector, waste management, waste and recycling (E), the construction sector (F), the wholesale and retail trade sector of car and motorcycle repair (G), the transportation and warehousing sector (H), the provision of accommodation and eating and drinking (I), information and communication sector (J), financial services and insurance sector (K), real estate sector (L), government administration, defense and compulsory social security sector (O), education services sector (P), health services and social activities sector (Q), and other services sector (R,S,T,U) are not base sectors because the LQ value is < 1.

Shift Share Analysis

National Growth (Nij)

Table 6 shows that all Nij values for each sector are positive. This shows that all sectors in West Tanjung Jabung grew faster than the same sectors at the provincial level (Jambi province). There are three sectors in West Tanjung Jabung regency that have a large contribution to the economic growth of Jambi province, namely the mining and quarrying sector (B), the manufacturing sector (C) and the agriculture, forestry, and fisheries sector (A).

The value of Nij (national growth) of the mining and quarrying sector (B) and the manufacturing sector (C) is higher than that of the agriculture, forestry and fisheries sector (A). This shows that in West Tanjung Jabung regency there has been a structural change where the growth of the industrial and service sectors is higher than the agricultural sector (starting to be more modern).

Sectoral Growth (Mij)

The Mij results in Table 6 are used to see the sectoral growth of each sector in West Tanjung Jabung regency against each sector in Jambi province. There are 8 sectors with fast growth (consists of: agriculture, forestry and fisheries sector (A), electricity and gas supply sector (D), construction sector (F), wholesale and retail trade; repair of cars and motorcycles sector (G), accommodation and food supply sector (I), information and communication sector (J), financial services and insurance sector (K) and health services and social activities sector (Q)) and 9 sectors with slow growth (consists of: mining and quarrying sector (B), manufacturing sector (C), water supply, waste management, waste and recycling sector (E), transportation and storage sector (H), real estate sector (L), corporate services sector (M, N), government administration, defense and compulsory social security sector (O), education services sector (P) and other services sector (R, S, T, U)). The explanation of sectoral growth (Mij) in this region can be seen in Table 7.

Table 7. Sectoral Growth

Fast Sector Growth (Mij > 0)	Slow Sector Growth (Mij < 0)
Agriculture, forestry and fisheries sector (A), electricity and gas supply sector (D), construction sector (F), wholesale and retail trade; repair of cars and motorcycles sector (G), accommodation and food supply sector (I), information and communication sector (J), financial services and insurance sector (K) and health services and social activities sector (Q).	Mining and quarrying sector (B), manufacturing sector (C), water supply, waste management, waste and recycling sector (E), transportation and storage sector (H), real estate sector (L), corporate services sector (M, N), government administration, defense and compulsory social security sector (O), education services sector (P) and others services sector (R, S, T, U).

Source: Table 6.

Competitiveness (Cij)

The Cij results in Table 6 are used to see the competitive advantage or competitiveness of each sector in West Tanjung Jabung regency against each sector in Jambi province. There are 8 sectors that have a competitive advantage or competitiveness (consists of: agriculture, forestry and fisheries sector (A), mining and quarrying sector (B), electricity and gas supply sector (D), construction sector (F), transportation and storage sector (H), information and communication sector (J), real estate sector (L), government administration, defense and mandatory social security sector (O)) and 9 sectors that do not have a competitive advantage or competitiveness (consists of: manufacturing industry sector (C), water supply, waste management, waste and recycling sector (E), wholesale and retail trade; repair of cars and motorcycles sector (G), provision of accommodation and food and beverages sector (I), financial services and insurance sector (K), corporate services sector (M,N), education services sector (P) and health services and social activities sector (Q) and other services sector (R, S, T, U)). An explanation of the competitive advantage (Cij) in this region can be seen in Table 8.

Table 8. Competitive Advantage of Each Sector

Have a Competitive Advantage/Competitiveness (Cij > 0)	No Competitive Advantage/Competitiveness (Cij < 0)
Agriculture, forestry and fisheries sector (A), mining and quarrying sector (B), electricity and gas supply sector (D), construction sector (F), transportation and storage sector (H), information and communication sector (J), real estate sector (L), government administration, defense and mandatory social security sector (O).	Manufacturing industry sector (C), water supply, waste management, waste and recycling sector (E), wholesale and retail trade; repair of cars and motorcycles sector (G), provision of accommodation and food and beverages sector (I), financial services and insurance sector (K), corporate services sector (M,N), education services sector (P) and health services and social activities sector (Q) and other services sector (R, S, T, U).

Source: Table 6.

Shift-Share (Dij)

Table 6 shows that all sectors have positive shift share values (Dij > 0). This means that all sectors in West Tanjung Jabung Regency experience progressive growth. This is the same as what Sinaga (2023) said that when the Shift-Share (Dij) value is positive, then the sector has progressive growth and has the potential to be developed.

Furthermore, the Klassen Typology is used to identify sectors in a region that are included in the leading, mainstay, prospective, or lagging sectors.

Klassen Typology Analysis

Table 6 shows that there are three leading sectors with LQ > 1; Dij > 0 (consists of: mining and quarrying sector (B), manufacturing sector (C) and corporate services sector (M, N)), and fourteen mainstay sectors with LQ < 1; Dij > 0 (consists of: Agriculture, forestry and fisheries sector (A), electricity and gas supply sector (D), water supply, waste management, waste and recycling sector (E), construction sector (F), wholesale and retail trade sector; repair of cars and motorcycles (G), transportation and warehousing sector (H), accommodation and food supply sector (I), information and communication sector (J), financial services and insurance sector (K), real estate sector (L), government administration, defense and compulsory social security sector (O), education services sector (P), health services and social activities sector (Q) and other services sector (R, S, T, U)). All these sectors can be seen in table 9.

Table 9. Klassen Typology Analysis Results

Leading Sector (LQ > 1, Dij > 0)	Mainstay Sector (LQ < 1, Dij > 0)
Mining and quarrying sector (B), manufacturing sector (C) and corporate services sector (M, N).	Agriculture, forestry and fisheries sector (A), electricity and gas supply sector (D), water supply, waste management, waste and recycling sector (E), construction sector (F), wholesale and retail trade sector; repair of cars and motorcycles (G), transportation and warehousing sector (H), accommodation and food supply sector (I), information and communication sector (J), financial services and insurance sector (K), real estate sector (L), government administration, defense and compulsory social security sector (O), education services sector (P), health services and social activities sector (Q) and other services sector (R, S, T, U).

CONCLUSION

Structural change has occurred in West Tanjung Jabung regency. This transformation is characterized by the development of the distribution of the industrial sector and services to GRDP. Some of these sectors such as the electricity and gas procurement sector (D), the construction sector (F), the wholesale and retail trade sector; repair of cars and motorcycles (G), the provision of accommodation and eating and drinking (I), the information and communication sector (J), the financial and insurance services sector (K), the real estate sector (L), the corporate services sector (M,N), the government administration, defense and mandatory social security sector (O), the education services sector (P) and the health services and social activities sector (Q).

The results of Location Quotient (LQ) and Shift Share analysis show that the mining and quarrying sector (B), the manufacturing industry sector (C) and the company services sector (M, N) are potential basic or leading sectors to be developed in West Tanjung Jabung regency. Other sectors that are mainstay sectors such as the agriculture, forestry, and fisheries sector (A), the electricity and gas procurement sector (D), the construction sector (F) and the information and communication sector (J), do not rule out the possibility of being developed into leading sectors because they have competitive advantages and fast growth.

ACKNOWLEDGMENT
We would like to give special thanks to all the individuals who have contributed to the successful completion of this study. We would also like to express our deepest appreciation to Prof. Didit who generously guided and shared his insights in compiling this study.

DECLARATION OF CONFLICTING INTERETS
We as authors declare that this manuscript is free from potential conflicts of interest with any party, including financial, personal, or other relationships with other individuals or organizations that could affect the integrity of the research findings or the objectivity of the conclusions drawn from this study. We confirm that this article has not been previously published, has not been considered for publication elsewhere, and that the manuscript has not been submitted simultaneously elsewhere.

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