REGIONAL COMPETITIVE ADVANTAGE OF AGRICULTURE AS THE LEADING SECTOR IN GARUT REGENCY, WEST JAVA PROVINCE, INDONESIA

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ABSTRACT

This research aims to determine agriculture as the leading sector for regional competitive advantage in the Garut Regency. The method used was Location Quotient, Shift-Share Analysis, and Klassen Typology to classify the sectors and determine the structural pattern of economic development in the Garut Regency. The findings of Location Quotient indicate that agriculture is the leading sector in Garut Regency. The shift-share calculation shows that agriculture has the highest national share and the most significant growth change but has a negative value on proportional shift (industry mix) and differential shift (competitive effect). Based on the Klassen typology, the agricultural sector is in Quadrant II, the developed but depressed industry. The results showed that the agriculture, forestry, and fisheries sector in Garut Regency has a competitive advantage, but it has not been supported structurally in West Java Province.

Keywords: regional; competitive advantages; Garut Regency; agriculture; sector

INTRODUCTION

Garut Regency is one of the regencies in West Java Province, Indonesia, the third-largest area of 27 regencies and cities. This area

is known as a center for agricultural production in West Java Province (Saefudin et al., 2021). As the center of the agricultural output, Garut Regency needs to take advantage of what the region offers to improve the regional economy, as stated in the Medium-Term Development Plan for the Region of Garut Regency for 2019 to 2024.

Medium-Term Development Plan for the Region of Garut Regency state that to increase agricultural sector contribution to Gross Regional Domestic Product of Garut Regency, the policy directions are: (a) Protecting productive agricultural land and repurposing abandoned land; (b) Increasing agricultural land intensification; (c) Increasing the productivity and quality of leading regional commodity of agricultural products; (d) Improving production support assistance and targeting accuracy; (e) Increasing the added value of the agricultural and fishery sectors, particularly in rural areas; (f) Establishing fisheries hubs and bolstering business institutions (Badan Perencanaan Pembangunan Daerah Kabupaten Garut, 2019).

Furthermore, the economic growth rate in Garut Regency in 2021 has increased compared to 2020. This growth was impacted by rising output in practically all economic sectors that were not affected by inflation. The Gross Regional Domestic Product (GRDP) of the Garut Regency in 2021 was 39.98 trillion rupiahs. From 38.60 trillion rupiahs in 2020, this sum climbed by 1.38 trillion rupiahs. This increment indicates that economic growth in 2020 was 3.58 percent, which was higher than the previous year's economic growth of –1.26%. The agricultural sector particularly supports the trend of economic development in the Garut Regency from 2017 to 2021. As a result, this industry has risen to prominence in the Garut Regency and given the possible contribution of economic resources to the Gross Regional Domestic Product (GRDP). The agricultural sector is the most significant contribution to Garut Regency's economy, with almost 40% (Figure 1) (Statistics of Garut Regency, 2022). Therefore, the research aim is to determine the regional competitive advantage of agriculture as the leading sector to sustain the economy of the Garut Regency area.
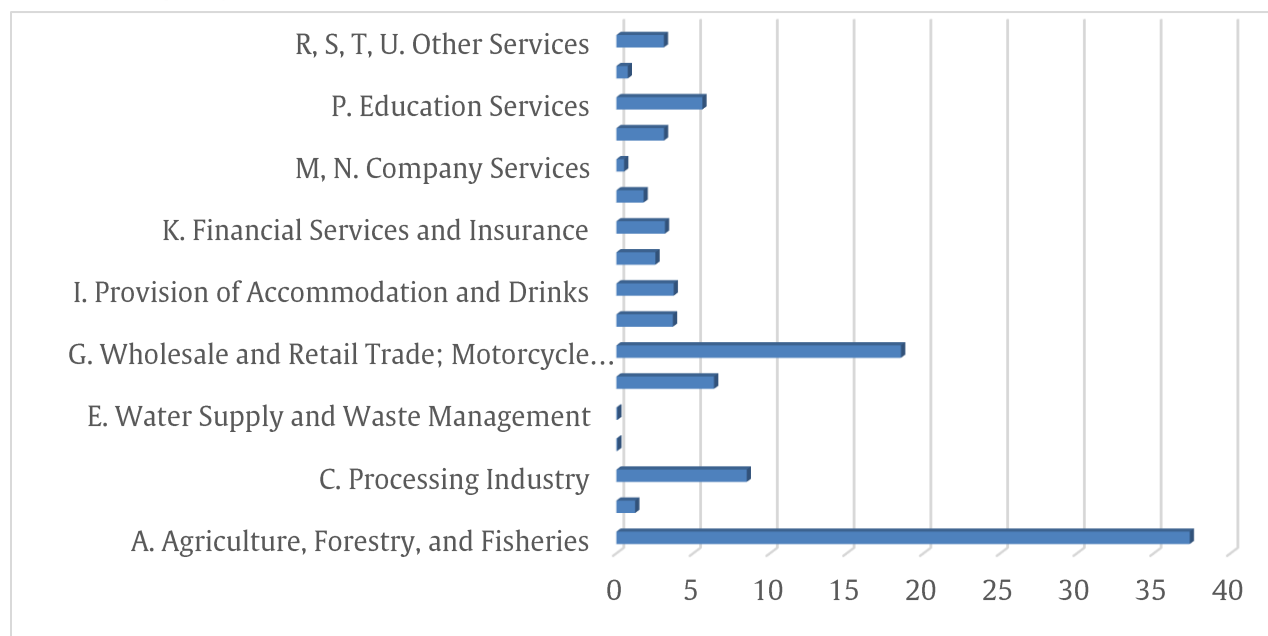

Figure 1. Percentage Distribution of Gross Regional Domestic Product by Industry in Garut Regency 2021 (Statistics of Garut Regency, 2022).

LITERATURE REVIEW
Regional Competitive Advantage

In terms of economic growth, a region is competitive if it has the circumstances to enhance its quality of living faster than the 'average' region with which it competes or if it has gained the ability to maintain winning outcomes (Rowe & McLaren, 2017). Regional

competitiveness can be determined by the industrial core competence of a region, and natural resources and regional capacity are factors in building regional competitiveness to develop a region's economy. Regional competitiveness depends on the capacity of its production to innovate and upgrade. Competitive advantage is sustained through the localized process (Martin et al., 2016; Pessoa, 2013).

The competitive advantage of a region can be based on the competitive advantage of a country determined by its sectoral capacity and ability to innovate (Porter, 1990). In general, regional competitive advantage refers to the power of the local economy and society to provide an increasing standard of living for its inhabitants.

Regional competitiveness in the agriculture sector cannot be appropriately defined by one or two economic and social factors; it requires a more comprehensive assessment. Three components were separated in the model of regional agricultural competitiveness: sources of competitiveness (human resources, farming circumstances, farming methods, and capital inputs), direct effects of competitiveness, and target outcomes of competitiveness (Kołodziejczak & Kossowski, 2014).

Some countries can increase their competitive advantage by imitating other countries' innovations. Most developing countries cannot mimic innovation development and access to universal and long-term technological upgrading or economic growth. Because by focusing on imitation, many developing countries have overlooked the healthy mix of national circumstances, economic conditions, and social resources. South Korea and Taiwan, along with Japan, are the only countries in Southeast Asia that have implemented a successful technology catch-up plan. These countries are intensely focused on developing their creative skills, recognizing national advantages, and strategizing based on technology to catch up (Wu et al., 2018).

Leading Sector in Regional Economy

A leading sector can be viewed from two perspectives: supply and demand (Syafaat and Supena., 2000). As seen from the supply side, leading sectors are superior in industries' biophysical, technical, and economic conditions in a specific location. This economic state involves technological competence, human resource capabilities, infrastructure such as marketplaces, and local habits. This concept is closer to locational benefits, but the leading sector has great demand in both local and international markets and competitive advantages (Fauzi, 2019). The leading sector is an essential industry with a strategic position to develop in an area. This strategic position is based on technical factors and socio-economic and institutional considerations.

Identifying the leading sector is critical as the foundation for regional development planning in the current era of regional autonomy, in which regions have the opportunity and authority to implement policies consistent with regional potential to accelerate regional economic development (Jolly et al., 2016). The criteria for the leading sector are (1) have a high rate of economic growth; (2) have a relatively high employment rate; (3) have a high degree of linkage between forward and backward sectors; and (4) can generate high added value.

A regional economy's leading sector can be assessed by location quotient (LQ). The LQ, which compares a local industry's share of total income or employment to this same percentage in a more significant location, is a straightforward indicator of spatial concentration based on either employment or income. The location quotient's justification for distinguishing between primary and non-basic production is based on two metrics: variance and magnitude. Location quotients for non-basic production will have minor variants, showing a standard activity level in that industry. Still, location quotients for primary production will have huge variances—measured across several places—indicating specialization at specific sites (Mack & Jacobson, 1996).

In addition to location quotient (LQ) analysis in identifying leading sectors, the shift-share analysis method is often used. A shift-share study is a traditional tool for interregional comparison. Shift-share research was conducted to compare, measure and evaluate the sectoral performance of a region (Mo et al., 2020).

Paying attention to the leading sectors to develop the local economy is crucial. Klassen's typology analysis is typically used to examine the composition of the economy and the trajectory of sectoral growth. Klassen divides the development stage into four significant

quadrants. The four quadrants are the relatively underdeveloped sector, the sector with slow growth, the industry with future growth, and the sector with sophisticated technology (Paramartha & Kristanto, 2020).

METHODOLOGY

The method employed is a literature review from multiple sources to explore the opportunity to develop the regional competitiveness of the Garut Regency. We obtained statistical data from BPS-Statistics of Jawa Barat Province, BPS-Statistics of Garut Regency, and the Agriculture Office of Garut Regency.

The data analysis technique used in this research is Location Quotient (LQ), Shift Share (SS), and Klassen Typology. Location quotient (LQ) is a comparison of the magnitude of the role of a sector/industry in an area to the volume of the part of that sector/industry nationally. This method determines the leading sectors/commodities in an area by comparing industries' roles at a higher level. Based on anticipated outcomes, this method can also demonstrate that this sector can be developed to provide districts and regions with a competitive advantage. The formula for Location Quotient (LQ) is (Rizani, 2020):

$$LQ = \frac{Si/S}{Ni/N} \qquad (1)$$

Si = GRDP value of sector i at a lower regional level

S = total GRDP at the lower regional level

Nt = GRDP value of sector i at the higher regional level

N = Total GRDP at the higher regional level

From the calculation of LQ, the following conclusions can be drawn:

1. If LQ > 1, the commodity is the leading commodity or the base sector. The items created are not only capable of meeting the demands of the area but are also capable of meeting the needs of other regions. This suggests that this product has the potential to become an economic hub in Garut Regency.

2. If Q = 1, indicating that the commodity is only sufficient for the requirements of the Garut Regency region.

3. If LQ 1, the commodity is a non-basic commodity that must be imported from outside the area since this sector is less productive in supplying regional demands.

Furthermore, this research also used Shift-share analysis with the formula (Soepono, 1993):

$$E \, r,i,t = (Ns \, i + P \, r,i + D \, r,i) \qquad (2)$$

Where:

E r, i,t is the addition of shift and share of sector i;

Nsi is National Share;

P r,i is the Proportional Shift, and

Dr, i is Differential Shift.

The national share or national growth effect quantifies the proportion of overall national factors, including the business cycle, interest rates, exchange rates, population growth, and trade and industrial policies, that may be attributed to local growth. The Proportional shift or industry mix impact measures the amount of regional development attributed to the degree of specialized employment or revenue sources in a particular region. Differential Shift is a competitive effect that hints at how much the regional economy was influenced by local factors (Loveridge, 1995).

Meanwhile, the Klassen typology approach is used to identify advanced and rapidly growing sectors, depressed growth sectors, potential sectors, and relatively underdeveloped sectors with the classification shown in Table 1 (Paramartha & Kristanto, 2020).

Table 1: Classification of Klassen Typology

Quadrant I $r_i \geq r$ and $y_i \geq y$	Quadrant II $r_i < r$ and $y_i \geq y$
Quadrant III $r_i \geq r$ and $y_i < y$	Quadrant IV) $r_i < r$ and $y_i < y$

r_i : growth rate of GDP sector for district i

r: the growth rate of GDP growth rate sector

y_i: contribution sector of district i

y: province contribution sector

RESULTS AND DISCUSSION

Location Quotient Analysis for Regional Competitive Advantage of Garut Regency

Garut Regency is located in the southern part of West Java Province and has an administrative

area of 306,519 ha. Garut Regency has 42 sub-districts, 21 sub-districts, and 403 villages. By the characteristics of the Garut Regency area, agriculture is still the leading sector. Nationally, Garut Regency is one of the centers of agricultural production. Most vegetables cultivated by farmers in Garut Regency have high economic value, such as shallot, red-chilly, corn, and potatoes.

According to Garut Regency GRDP statistics, the agricultural sector will generate 12934,34 billion rupiahs in 2021, with a total GRDP of 39981,19 billion rupiahs. Meanwhile, the agricultural sector's GRDP in West Java province in 2021 was 188617,98 billion rupiahs, with a total GRDP of 2209822,38 billion Rupiah. The following is an examination of the computation of the LQ value from the industries sector in Garut Regency and West Java Province.

Table 2 shows that 11 sectors are primary sectors and six sectors are not basic sectors. The basic sector means these industries get the money from the other regions, while the non-basic sector gets the money from Garut Regency.

Table 2. Location Quotient Analysis of Industries or Sectors in Garut Regency, West Java Province, Indonesia

Industries/ Sectors	Location Quotient (LQ)					Average	Criteria
	2017	2018	2019	2020	2021		
Agriculture, Forestry, and Fisheries	4,55	4,58	4,52	4,55	4,49	4,5	Base
Mining and quarrying	1,21	1,22	1,25	1,33	1,29	1,2	Base
Manufacture	0,18	0,19	0,20	0,21	0,21	0,20	Non-Base
Electricity and Gas Supply	0,15	0,15	0,16	0,18	0,17	0,16	Non-Base
Water Supply, Waste Management, Waste and Recycling	0,62	0,63	0,64	0,63	0,61	0,63	Non-Base
Construction	0,00	0,77	0,78	0,81	0,78	0,63	Non-Base
Wholesale and Retail Trade, Car and Motorcycle Repair	0,41	1,39	1,38	1,44	1,38	1,20	Base
Transportation and Warehousing	4,43	0,81	0,81	0,83	0,81	1,54	Base
Accommodation and Food & Beverage	1,40	1,42	1,46	1,54	1,49	1,46	Base
Information and Communication	0,74	1,15	0,71	0,67	0,65	0,79	Non-Base
Financial Services and Insurance	1,10	1,12	1,16	1,18	1,12	1,13	Base
Real Estate	1,54	1,55	1,54	1,55	1,47	1,53	Base
Company Services	1,30	0,13	1,33	1,44	1,39	1,12	Base
Government Administration, Defense and Mandatory Social Security	1,59	1,61	1,57	1,70	1,66	1,62	Base
Education Services	1,71	1,73	1,76	1,77	1,73	1,74	Base
Health Services and Social Activities	0,99	1,00	0,99	1,01	0,98	0,99	Non-Base
Other services	1,67	1,69	1,68	1,71	1,66	1,68	Base

The base sectors are (1) Agriculture, forestry, and fisheries, (2) Mining dan quarrying, (3) Wholesale and retail trade, motorcycle, and car repair; (4) Transportation and Warehousing, (5) Accommodation, food; and beverage, (6) Financial service and insurance, (7) Real estate, (8) Company service, (9) Government administration, defense and mandatory social security, (10) Education service, and (11) Other services. The non-base sectors are (1) Manufacture, (2) Electricity and gas supply, (3) Water supply, waste management, waste

recycling, (4) Construction, (5) Information and communication, and (6) Health services and social activities.

Garut Regency produces almost all agricultural products, plantations, and tourism-based products. Because the land area owned by each sub-district is used as a large amount of agricultural land, Garut is one of West Java's most prominent agricultural producing areas. The availability of land and climate affect the cultivation of plantation commodities, causing this sub-sector to be the most significant contributor to the economy of the Garut Regency (Soegoto et al., 2022).

The leading sector can substantially contribute to the area by meeting the region's demands but also the needs of other regions. These eleven sectors significantly impact the economic growth and regional development of Garut Regency since they can be developed as a resource in Garut Regency's economic development. These sectors can cover the Garut Regency region's demands and possibly export outside of the district. Regions and natural resources are important determinants of a sector's or sub-growth sector (Bangun, 2018). According to Rizani (2017), areas close to resources will develop in proportion to the resources possessed. The primary sectors supported by the physical location of Garut Regency, which is in the highlands, are food crops, cattle, and fishing (Warlina et al., 2022).

Meanwhile, other sectors, such as manufacturing, electricity and gas, water supply, waste management, construction, health services, and social activities, are still inferior. These six sub-sectors do not have a competitive advantage; their output can only cover the demands of the Garut Regency region and has no export potential. The six non-basic sectors must also be considered for expansion since they help the development of the basic sector in boosting the economy of the Garut Regency.

According to the economic base hypothesis, the base sector drives regional economic growth. The base sector is the one that gets money from outside the country or region. The existence of competition in all aspects encourages areas to adopt new operating models based on new technology, creativity, and sustainability. The potential of the base sector increases the

competitive advantage of a region (Miszczak, 2021)

Shift-share analysis for Regional Competitive Advantage of Garut Regency

The shift-share analysis aims to compare the differences in the growth rates of various sectors (industries) in an area with a higher hierarchical area. The shift-share analysis of the Garut Regency's economy was carried out using the sectoral GRDP of the West Java Province's sectoral GRDP and the Garut Regency in 2017 and 2021. Table 3 shows the shift-share analysis in Garut Regency. In this shift-share analysis calculation, the GRDP data used is 2017 and 2021. Based on the total the GRDP of Garut Regency and West Java Province, the increase in GRDP in Garut Regency is 4516.29 billion rupiahs for all sectors.

There are ten sectors with negative Proportional Shift; those are (1) Agriculture, Forestry, and Fisheries; (2) Mining and quarrying; (3) Manufacture; (4) Electricity and Gas Procurement; (5) Wholesale and Retail Trade, Car and Motorcycle Repair; (6) Transportation and Warehousing; (7) Accommodation and Food & Beverage; (8) Company Services; (9) Government Administration, Defense and Mandatory Social Security; and (10) Other Services. Regional growth rates in these ten industries are lower than national growth rates due to the effect of every sector nationally (externally) on industries in West Java's GRDP. In the Garut Regency, the agriculture sector has experienced a negative proportional shift.

The Differential Shift value with a negative sign has five sectors; those are (1) Agriculture, Forestry, and Fisheries, (2) Construction, (3) Information and Communication, (4) Health Services and Social Activities, and (5) Other Services. Differential shift show a competitive advantage effect on the regional economy, and the sectors with negative value mean these sectors decrease in competitive advantage.

In general, shift-share analysis has the potential to assist regional economic development organizations in developing leading sectors. Economic developers must employ various tools when evaluating the local economy, and Shift-share does not account for

the underlying causes of regional growth, whether good or negative (Loveridge, 1995).

Table 3. Shift-Share Analysis of Industries or Sectors in Garut Regency, West Java Province, Indonesia

Sectors/ Industries	National Share (in Billion Rupiah)	Proportional Shift (in Billion Rupiah)	Differential Shift (in Billion Rupiah)	Change of GRDP of sector i (in Billion Rupiah)
Agriculture, Forestry, and Fisheries	1462.69	-412.70	-93.38	956.61
Mining and quarrying	103.90	-187.85	55.33	-28.62
Manufacture	344.44	-52.07	454.10	746.47
Electricity and Gas Supply	2.65	-2.23	3.48	3.90
Water Supply, Waste Management, Waste and Recycling	2.19	3.43	-0.36	5.26
Construction	275.82	45.00	60.06	380.88
Wholesale and Retail Trade, Car and Motorcycle Repair	919.57	-436.26	138.17	621.49
Transportation and Warehousing	166.97	-87.75	20.34	99.55
Accommodation and Food & Beverage	159.46	-36.02	99.87	223.31
Information and Communication	129.06	628.23	-223.16	534.12
Financial Services and Insurance	122.15	19.33	23.04	164.52
Real Estate	79.97	160.82	-32.46	208.33
Company Services	24.38	-14.26	15.29	25.41
Government Administration, Defense and Mandatory Social Security	138.16	-169.88	55.76	24.04
Education Services	210.04	111.11	28.18	349.33
Health Services and Social Activities	33.91	22.19	-3.26	52.84
Other services	155.53	-0.05	-6.64	148.85
Total	4330.88	-408.96	594.38	4516.29

Klassen Typology Analysis for Regional Competitive Advantage of Garut Regency

The Klassen Typology analysis employed in this research can determine how to explain each region's structural pattern of economic development. Klassen Typology research reveals four economic sector groups based on the value of each sector's growth rate and the value of the contribution per sector. Table 4 and Figure 2 show Klassen Typology Analysis in Garut Regency.

With 17 sectors or industries making up the GRDP of the Garut Regency, five sectors are in quadrant I, three are in quadrant II, four are s in quadrant III, and two industries are in quadrant IV. In quadrant I, which shows that the sector is growing fast and advancing are the sectors: (1) Mining and quarrying, (2) Wholesale and Retail Trade, Car and Motorcycle Repair, (3) Accommodation and Food & Beverage, (4) Financial Services and Insurance, and (5) Government Administration, Defense and Mandatory Social Security.

Table 4: Klassen Typology Analysis for Economic Structure in Garut Regency, West Java Province, Indonesia

Sectors/ Industries	West Java Province		Garut Regency		Klassen Typology Classification
	GDP growth rate per sector	Contribution per sector	GDP growth rate per sector	Contribution per sector	
	r	y	ri	yi	
Agriculture, Forestry, and Fisheries	2.12%	7.23%	1.95%	32.62%	Quadrant II
Mining and quarrying	-2.54%	1.73%	-0.83%	2.17%	Quadrant I
Manufacture	2.58%	42.80%	6.13%	8.52%	Quadrant III
Electricity and Gas Supply	0.71%	0.37%	4.30%	0.06%	Quadrant III
Water Supply, Waste Management, Waste and Recycling	7.11%	0.08%	6.67%	0.05%	Quadrant IV
Construction	3.53%	8.35%	4.13%	6.52%	Quadrant III
Wholesale and Retail Trade, Car and Motorcycle Repair	1.74%	15.15%	2.14%	21.02%	Quadrant I
Transportation and Warehousing	1.49%	4.70%	1.83%	3.81%	Quadrant III
Accommodation and Food & Beverage	2.44%	2.66%	4.18%	3.86%	Quadrant I
Information and Communication	14.96%	4.87%	11.00%	3.40%	Quadrant IV
Financial Services and Insurance	3.38%	2.53%	3.90%	2.86%	Quadrant I
Real Estate	8.21%	1.31%	7.24%	2.00%	Quadrant IV
Company Services	1.99%	0.42%	3.55%	0.57%	Quadrant I
Government Administration, Defense and Mandatory Social Security	-0.61%	1.89%	0.54%	3.05%	Quadrant I
Education Services	4.41%	2.91%	4.76%	5.04%	Quadrant I
Health Services and Social Activities	4.89%	0.81%	4.61%	0.81%	Quadrant II
Other services	3.00%	2.17%	2.88%	3.64%	Quadrant II

The following sectors are shown in quadrant II, which indicates a slow and depressing rate of sector growth: (1) Agriculture, Forestry, and Fisheries, (2) Health Services and Social Activities, and (3) Other services. There are four sectors in quadrant III, which indicates that the industry has the potential to expand: (1) Manufacture, (2) Electricity and Gas Supply, (3) Construction, and (4) Transportation and Warehousing. Two sectors can be found in quadrant IV, which depicts a relatively underdeveloped sector: (1) Water supply, waste management, waste and recycling, and (2) Information and Communication.

Developing Regional Competitive Advantage of Agriculture as Leading Sector in Garut Regency, West Java Province, Indonesia

The research aim is to identify whether agriculture as a leading sector has a competitive advantage. From LQ calculation, agriculture has the highest average LQ among the 17 industries in Garut Regency.

From shift-share analysis, the agriculture sector has the highest national share or national growth effect with a value of 1462.69 billion rupiahs, from a total of 4330.88 billion rupiahs, or 33.8%. The change in this sector is 956.61 billion rupiahs from a total change of 4516.29

billion rupiahs or 21.2%, which is the highest among the 17 industries.

The agriculture sector in Garut Regency is specialized. Still, the agricultural sector in West Java Province is expanding slowly, as indicated by the sector's negative proportionate shift or industry mix value. Differential shifts or competitive effects negatively impact the agriculture sector. As a result, Garut Regency's agriculture industry faces fewer favorable locational conditions.

According to the Klassen Typology calculation, the agricultural sector is in Quadrant II, which indicates it is under pressure and expanding slowly. Since it contributes more than other sectors, its growth is somewhat slower, so that sector is depressed.

According to the identification findings using multiple techniques, the leading economic sector in Garut Regency is agriculture. Due to slower .

growth than in other areas, the industry is less competitive. Examples of different regions that have successfully evolved can be incorporated so that the agriculture industry can develop competitive advantages.

The study's findings in Azerbaijan demonstrate the necessity and viability of growing the agriculture industry based on a cutting-edge scenario and considering the sector's current stage of development. Research has revealed that maintaining the same quality in human capital and labor productivity can be the most significant barrier to creating the best inventive scenario for the sector's development (Hajiyeva, 2021). Agriculture acted as the Ukrainian economy's buffer during the macroeconomic difficulties. In addition to ensuring food security, its export assisted in supplying foreign cash and slowed the depreciation of the national currency (Onegina et al., 2020).

Quadrant I			Quadrant II	
(Advanced and rapidly growing sectors): $r_i \geq r$ and $y_i \geq y$			(Depressed growth sectors): $r_i < r$ and $y_i \geq y$	
• Mining and quarrying • Wholesale and Retail Trade, Car and Motorcycle Repair • Accommodation and Food & Beverage • Financial Services and Insurance • Government Administration, Defense and Mandatory Social Security			• Agriculture, Forestry, and Fisheries • Health Services and Social Activities • Other services	
Quadrant III			Quadrant IV	
(Potential growing sectors): $r_i \geq r$ and $y_i < y$			(Relatively underdeveloped sectors): $r_i < r$ and $y_i < y$	
• Manufacture • Electricity and Gas Supply • Construction • Transportation and Warehousing			• Water Supply, Waste Management, Waste and Recycling • Information and Communication	

Figure 2. Klassen Typology of the Economic Structure of Garut Regency, West Java Province, Indonesia

CONCLUSION

The agricultural sector is essential to economic growth because it generates the most significant income and is the largest contributor to Garut Regency. Compared to other industries with an LQ of 4.5, this sector can meet needs inside and outside the region and play a significant role in the economy of Garut Regency.

The shift-share calculation also shows that agriculture has the highest national share, with 1462.69 billion rupiahs or 33.8%. However, there is a negative value for proportional and differential shifts. The Klassen typology analysis indicates that the agricultural sector is in Quadrant II, meaning the industry is developed but depressed.

ACKNOWLEDGMENT

REFERENCES

Badan Perencanaan Pembangunan Daerah Kabupaten Garut. (2019). RPJMD Kab Garut 2019-2024. Pemerintah Kabupaten Garut.

Bangun, R. H. (2018). Analisis prioritas pembangunan wilayah berdasarkan sektor produk domestik regional bruto Kabupaten Tapanuli Tengah-Sumatera Utara. Jurnal Litbang Sukowati: Media Penelitian dan Pengembangan, 2(1), 19-35. https://doi.org/10.32630/sukowati.v2i1.38

Fauzi, A., Mulyadi, E., Kustini, K., Santoso, B., & Wardani, N. I. K. (2019). Analysis Of Regional Economic Potentials In Development of Superior Commodities: A Study of Bondowoso District. *Humanities & Social Sciences Reviews*, *7*(1), 164-170. https://doi.org/10.18510/hssr.2019.7120

Hajiyeva, N. G. (2021). Scenario approach to agricultural development in Azerbaijan. *Journal of Eastern European and Central Asian Research (JEECAR)*, *8*(4), 450–462. https://doi.org/10.15549/jeecar.v8i4.835

Jolly, B., Isa, F. M., Othman, S. N., & Ahmdon, M. A. S. (2016). The influence of management capability, marketing capability and competitive advantage on Malaysian construction project performance. *International Review of Management and Marketing*, 6(8), 142-148.

Kołodziejczak, A., & Kossowski, T. (2014). Regional competitiveness of agriculture in Poland. *Village and Agriculture (Wieś i Rolnictwo)*, 3(164), 57–70.

Loveridge, S. (1995). A Practical Approach to Shift-share Analysis. *Journal of the Community Development Society*, 26(1), 110–124.

Mack, R. S., & Jacobson, D. S. (1996). Core periphery analysis of the European Union: A location quotient approach. *The Journal of Regional Analysis and Policy*, *26*(1), 3–21.

Martin, R.; Sunley, P.; Gardiner, B.; and Tyler, P. (2016). How regions react to recessions: Resilience and the role of economic structure. *Regional Studies*, 50(4), 561-585. https://doi.org/10.1080/00343404.2015.1136410

Miszczak, K. (2021). The importance of the economic base theory in urban and regional research. *Biblioteka Regionalisty*, *2021*(21), 92–110. https://doi.org/10.15611/br.2021.1.08

Mo, S. W., Lee, K. B., Lee, Y. J., & Park, H. G. (2020). Analysis of import changes through shift-share, location quotient, and BCG techniques: Gwangyang Port in Asia. *The Asian Journal of Shipping and Logistics*, *36*(3), 145–156. https://doi.org/10.1016/j.ajsl.2020.01.001

Onegina, V., Megits, N., Antoshchenkova, V., & Boblovskyi, O. (2020). Outcome of capital investment on labor productivity in agriculture sector of Ukraine. *Journal of Eastern European and Central Asian Research (JEECAR)*, *7*(1), 12–25. https://doi.org/10.15549/jeecar.v7i1.355

Paramartha, D., & Kristanto, B. A. (2020). Identification of Superior Commodity in Agriculture Sector in Magelang Regency. *Agrisosionomics, Jurnal Sosial Ekonomi Dan Kebijakan Pertanian*, *4*(2), 247–255.

Pessoa, A. (2013). Competitiveness, clusters and policy at the regional level: Rhetoric. *Practice in Designing Policy for Depressed Regions*, 5, 16

Porter, M. E. (1990). The Competitive Advantage of Nations. *Harvard Business Review*, *March-April*, 21.

Rachman, H. (2003). Penentuan Komoditas Unggulan Nasional di Tingkat Provinsi. Makalah Lokakarya 'Sintesis Komoditas Unggulan Nasional'. Bogor.

Rizani, A. (2017). Analisis potensi ekonomi di sektor dan subsektor pertanian, kehutanan dan perikanan Kabupaten Jember. *Jurnal ekonomi pembangunan*, 15(2), 137-156. https://doi.org/10.22219/jep.v15i2.5361

Rowe, J. E., & McLaren, D. (2017). Exploring Competitive Advantage In A Regional

Community Context. *Australasian Journal of Regional Studies*, 23(22), 152–173

Saefudin, N., Sudrajat, A., Dora, Y. M., Sari, O. Y., & Sakti, I. W. (2021). Efforts To Increase the Competitiveness of Local Products in Global Competition in The Middle of The Covid-19 Pandemic, In Garut District, West Java. *Review of International Geographical Education Online*, 11(6), 249-261.

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