

Location Quotient and Shift Share Analysis for Sragen's Economic Potential

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Abstract

This study employs the basic economic theory approach to evaluate the performance of regional economic development in Sragen Regency, Central Java Province. The primary objective is to identify the base/leading and prospective economic sectors that could bolster regional productivity. The study utilizes a quantitative approach, employing the Location Quotient and Shift Share methods. The data used for this analysis is the secondary data of the Gross Regional Domestic Product (GRDP) of Sragen Regency and Central Java Province from 2015 to 2019. The research findings reveal six sectors as the base/leading and prospective sectors. These include Agriculture, Forestry and Fisheries, Electricity and Gas Procurement, Wholesale and Retail Trade, Car and Motorcycle Repair, Corporate Services, and Other Services. These sectors are considered pivotal in driving the region's economic growth. In addition to these, ten other sectors, while not being the base, show prospective development. These sectors present potential opportunities for further economic expansion. However, the Mining and Quarrying sector falls into the category of non-basis and is not considered a prospective sector. The Shift Share Analysis results indicate that the Manufacturing Industry outperforms other sectors in terms of competitiveness in the Sragen Regency. This suggests that the Manufacturing Industry holds a significant position in the region's economic landscape. In conclusion, the study provides valuable insights into the economic sectors that are instrumental in strengthening regional productivity in Sragen Regency. It also highlights the sectors with potential for future development, thereby guiding strategic planning for regional economic growth.

Keywords: Analysis, Base regional economics potential, Location Quotient, Regional Economics Development, Shift Share



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Introduction

Sustainable development, economic growth, innovation, and regional economic resilience are just few of the aspects that make up the complex idea of autonomous regions' economic potential. The significance of Gross Regional Domestic Product (GRDP) per capita as a measure of economic wellbeing and community development is emphasized by Rochmatullah et al. (2020). Tavassoli & Carbonara (2014) highlight the importance of innovative capability for regions to maintain their competitive advantages in the context of regional innovation and economic growth. Additionally, He et al. (2022) stress the importance of industry diversity in bolstering the economic structure of regions by arguing that varied industries can support regional economic resilience. These findings highlight how crucial it is to support entrepreneurship and innovation in order to maximize the economic potential of autonomous regions.

Furthermore, Lu et al. (2022) highlights the interdependence of variables impacting economic growth and the geographical relativity of variables when examining regional economic difficulties. The aforementioned references emphasize the necessity of tackling inequalities and variables influencing economic expansion in order to fully realize the economic potential of autonomous regions.

The main principle of regional autonomy in Indonesia is to give greater authority to regions (regencies/cities and provinces) to manage and manage their respective development households (Saragih, 2018; Maulana & Wardah, 2023). One of the regional development agendas is local economic development which according to Muluk (2013) is interpreted as an effort to eliminate various obstacles to efforts to build community welfare. To achieve this, good development planning is needed so that it can optimize every potential and creativity in the area (Muluk, 2013). This potential-based development needs to be carried out based on scientific studies to support both the planning aspect and the evaluation of whether the potential has been contained in development planning (Saragih, 2018). In addition, to achieve sustainable development and growth results, coherence of strategies and policies is needed which at least includes efforts to increase productivity, competitive advantage and efficiency, and adequate logistics systems for the development of a *demand-based* and export-oriented economy (Stimson, Stough, & Roberts, 2006).

The performance of regional economic development needs to be measured and assessed. One reason is that there may be a sector that is short-term superior in terms of volume, added value, or absorption of its workforce but is inefficient when compared to a region elsewhere; or sectors that are less dominant in a region turn out to have good development prospects in the future (Stimson, Stough, & Roberts, 2006). Some indicators that can be used in this measurement are Gross Regional Domestic Product (GRDP), distribution of management/control over production factors and equal distribution of income of the population, the number of workers, the poverty rate of the area, the level of productivity, to the quality of the environment (Saragih, 2018). Measurements of productivity, efficiency, and growth, for example, can be done using indicators such as regional income (GDP), financial/economic viability, specialization/comparative-competitive advantage, and productivity of superior products (Saragih, 2018). This measurement is a concept from a theory, namely the theory of economic bases. In this case, the theory sees an economic sector based on both base and non-base sectors. The base sector is seen in terms of production that can meet the consumption needs of the region independently. Moreover, this sector – the base sector – can also export its production to other regions. Meanwhile, its non-production base sector is only sufficient for the consumption of the area (Stimson, Stough, & Roberts, 2006).

One method for measuring base economic sectors is *Location Quotient* (LQ) whose calculations have been popular among researchers and tend to be easy to do because they do not require complicated calculations and analysis (Isserman, 1977). In addition, this method can also show a comparative picture of the advantages of a region in producing a commodity/sector (Saragih, 2018). Here are various studies that use this method. The *Shift*

Share Analysis approach is also often used to measure sectoral competitive advantage in a region.

Literature Review

One of the most important components of regional and national progress is the realization of economic potential. Sustainable growth requires an understanding of the coordinated relationship between investment potential and economic progress (Wei et al., 2020). Furthermore, when deciding on development priorities in the current economic environment, it's critical to take risks and shifts in economic potential into account (Лубсанова, 2021). Developing development policies and boosting economic growth are significantly influenced by regional economic activity (Putri et al., 2022).

Additionally, a region's capacity for competition is essential to guaranteeing high rates of socioeconomic development, particularly when there is intense interregional rivalry (Golovikhin, 2021). Analyzing a variety of structural components, including production, labour, finance, innovation, marketing, institutional, and management aspects – all of which are evaluated in terms of resources, capabilities, and competencies – is necessary to determine a company's economic potential (Mickiewicz & Volkava, 2022). Furthermore, developing growth plans requires an awareness of market potential and how it relates to economic development (Head & Mayer, 2010). The development of the economy in impoverished villages is heavily dependent on natural resources, underscoring the importance of harnessing local economic growth potential (Alam et al., 2022).

A region's economic potential is usually assessed using indicators such as Gross Regional Domestic Product (GRDP) per capita, which gauges community development and economic welfare. However, as has been mentioned, sustainable development is also a crucial element in realising the economic potential of regions, as highlighted by emphasised the need for strategies to enhance economic sustainability in autonomous areas. It is necessary to comprehend the unique economic characteristics of a place in order to assess its economic potential that showed how resource endowment and technology conditions affect the level of economic growth in various locations, emphasising the need of considering these factors when evaluating economic potential. Furthermore, regional economic potential influences regional economic potential, which in turn shapes migratory trends and demographic dynamics.

In addition, elements like the production structure, the most important economic sectors, and connectivity policies affect a region's potential for growth. While Putri et al. (2022) examined the dominant economic sector in the context of economic development in a particular regency, Boguslavskay (2020) regarded the notions of "economic potential of the region" and "production potential of the region" as determinants in the region's economic development. All things considered, a review of the literature on a region's economic potential should cover a broad range of topics, such as economic sustainability, resource endowment, demographic dynamics, prominent economic sectors, and accessibility metrics. It is possible to have a thorough grasp of a region's economic potential by taking these factors into account.

Here are some research precedents through *location quotient* and *shift-share* methods carried out to identify base/superior economic sectors to develop the regional economy.

Table 1. Various studies use *the Location Quotient (LQ)* method.

Writer	Method	Result
Isabhandia & Setiartiti (2021)	<i>SLQ, DLQ, Shift Share Analysis (SSA), Klassen Typology & SWOT</i>	SLQ & DLQ results show 3 (three) base and prospective sectors in Kulon Progo with identification based on 2013-2017. Calculations are used for the development of regional economic strategies.
Morrissey (2014)	<i>Location Quotient (LQ)</i>	The related sectors of Financial Services and Insurance as well as Transport and Telecommunications have prospects in the BMW region of Ireland so regional policies can lead to efforts to develop that potential.
Puspitaningrum & Sudrajat (2021)	<i>Location Quotient, Shift Share, SWOT Analysis</i>	The leading commodities in the agricultural sector are cashews, rice, coconut, sweet potato, and sugarcane. While on farms in the form of rabbits, ducks and cows. In fisheries in the form of shrimp ponds and mujahir fish. Development policy in the South Coast of Purworejo Regency needs to be directed at technological modernization.
Manullang, Rusgiyono, & Warsito (2019)	<i>Location Quotient, Shift Share & Moran's Index</i>	Each district/city in Central Java has its superior aquaculture commodities and their production values are not related to each other. Cilacap Regency is the main area in this aquaculture commodity.
Sihaloho, Saragi, & Simbolon (2018)	<i>Location Quotient</i>	In Toba Samosir District, the leading sectors are Agriculture, the Processing Industry, and the Procurement of Electricity, Water, and Gas. The agricultural and industrial sectors contribute 2/3 of GDP.
Ekowati, Prastyo, & Mukson (2020)	<i>Location Quotient & Co Variance</i>	Grobogan district is the largest producer of rice and soybeans in Prov. Central Java so that the agricultural sector is the base/flagship and can supply food needs in Central Java, especially rice, soybeans, and corn which have LQ > 1.
Diansari, et al., (2021)	<i>Location Quotient</i>	There are 15 commodities in the agricultural sector identified as superior/base to be developed in Molaan Mongondow District, Sulut. Some of them have become the government's main focus for development.
Berawi, Zagloel, Perdana, &	<i>Location Quotient</i>	LQ is used to provide alternative routes for the Trans Sumatra toll road based on the calculation of

Writer	Method	Result
Mulyanto (2017)		GRDP, superior commodities, and population density.

Source: processed by Researchers, 2023

Method

This quantitative research takes the locus in Sragen Regency to examine the leading sectors or the base of the area. In this case, data analysis methods are carried out, namely *Location Quotient (LQ)* and *Shift Share Analysis* with secondary data in the form of a percentage of Sectoral GDP based on Constant Prices in the Sragen Regency. Moreover, the secondary data is also obtained from Central Java Province using data in the form of *time series*, namely data from 2015 to 2019 to provide an overview of how far changes have occurred in each sector and aggregate.

This LQ method has 2 (two) ways, namely *Static* and *Dynamic*. The difference is that DLQ introduces the growth rate in its calculations while SLQ focuses on the value of GDP only (Arrazy, 2020, pp. 370-371). *The shift-share analysis* itself is used to determine the extent of competitiveness of a sector to local and regional economic growth (Stimson, Stough, & Roberts, 2006, pp. 84-85). *Shift share analysis* calculates the influence of regional growth (Nij), competitive advantage (Cij), and *proportional shift/industry mix* (Mij), (Hermanto, 2000, p. 56).

1. *Static Location Quotient (SLQ) formula:*

$$LQ = \frac{V_i/V_t}{Y_i/Y_t}$$

V_i = Sectoral GRDP Value of Sragen Regency

V_t = Total GDP Value of Sragen Regency

Y_i = Sectoral GDP Value of Prov. Central Java

Y_t = Total GDP Value of Prov. Central Java

The results of the SLQ analysis will show, if:

SLQ > 1; indicates base/featured sector, has a comparative advantage.

SLQ < 1; indicates a non-base sector, has no comparative advantage.

SLQ = 1; indicates a non-base sector, the production is only sufficient for consumption of the area or needs to be imported from outside the region.

2. *Formula Dynamic Location Quotient (DLQ):*

$$DLQ_{ij} = \left(\frac{IPPS_{ij}}{IPPS_t} \right)^t$$

$$IPPS_{ij} = \frac{(1 + g_{ij})}{(1 + g_j)}$$

$$IPPS_i = \frac{(1 + G_i)}{(1 + G)}$$

DLQ_{ij} = *Sectoral Dynamic Location Quotient* in Sragen District

IPPS_{ij} = *Index of potential development of sector I* in Sragen Regency

- IPPS_i = Index of the development potential of the sector I in Prov. Central Java
 t = The difference between the final year and the initial year used in the study
 g_{ij} = sectoral growth rate in Sragen Regency
 g_j = average sector growth in Sragen Regency
 G_i = sectoral growth rate in Prov. Central Java
 G = average sector growth in Prov. Central Java

The results of the DLQ analysis will show if:

DLQ > 1; The sector is prospective.

DLQ < 1; The sector is not prospective.

3. Formula Shift Share Analysis (SSA):

1. Effects of regional economic growth

$$N_{ij} = E_{ij} \cdot R_n$$

Proportional shift/sector mix

$$M_{ij} = (R_{in} - R_n) \cdot E_{ij}$$

Level of competitive advantage/sector competitiveness

$$C_{ij} = (R_{ij} - R_{in}) \cdot E_{ij}$$

Impact of Regional Economic Growth

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

where:

E_{ij}: Value of GDP Sector *I* at the District level

R_{ij}: GDP growth rate of Sector *i* in Sragen Regency

R_{in}: GDP growth rate of Sector *i* in Prov. Central Java

R_n: Average GDP growth at the Prov. Central Java

Result and Discussion

A. SLQ Calculation Results

Table 2. SLQ Calculation Results of Sragen Regency

No	Sector	2015	2016	2017	2018	2019	Average
1	Agriculture, Forestry and Fisheries	0,99	1,15	1,13	1,12	1,12	1,10
2	Mining and Quarrying	0,15	0,18	0,19	0,18	0,18	0,18
3	Processing Industry	0,81	0,97	1,00	1,02	1,04	0,97
4	Electricity and Gas Procurement	1,36	1,58	1,56	1,58	1,45	1,51
5	Water Procurement; Waste Management, Waste, and Recycling	0,88	1,03	1,02	1,02	1,02	0,99
6	Construction	0,58	0,67	0,66	0,65	0,64	0,64
7	Wholesale and Retail Trade; Car and Motorcycle Repair	1,26	1,45	1,43	1,40	1,40	1,39
8	Transportation and Warehousing	0,73	0,83	0,81	0,79	0,78	0,79
9	Provision of Accommodation and Food & Drink	0,83	0,98	0,99	1,00	1,01	0,96
10	Information and Communication	0,33	0,39	0,39	0,39	0,38	0,38

No	Sector	2015	2016	2017	2018	2019	Average
11	Financial Services and Insurance	0,85	0,90	0,99	1,01	1,01	0,95
12	Real Estate	0,46	0,54	0,53	0,54	0,54	0,52
13	Company Services	1,03	1,18	1,18	1,18	1,17	1,15
14	Government Administration, Defense, and Compulsory Social Security	0,70	0,81	0,80	0,80	0,79	0,78
15	Education Services	0,92	1,07	1,06	1,07	1,06	1,04
16	Health Services and Social Activities	0,80	0,91	0,89	0,88	0,88	0,87
17	Other Services	0,96	1,08	1,04	1,03	1,02	1,03

Source: processed by Researcher, 2023

The leading sector (base) increased from 3 sectors (2015) to 10 sectors (2019). However, when viewed from the average value in the last 5 years, only 6 sectors are considered to be superior / base sectors. On trend, the majority of sectors have decreased SLQ numbers. This decrease occurred in 12 sectors out of a total of 17 sectors (a deficit of 0.58%). In this case, the Mining and quarrying sector became the sector with the largest decline (-0.19).

Meanwhile, the Processing Industry Sector has the potential to become a base sector in the future considering its significant upward trend every year even starting from 2017-2019 has passed SLQ > 1 even though the 5-year average is still 0.97. This growth is also reflected in the processing industry sector, which is the largest contributor to Sragen's GDP, reaching 37.26% in 2020. Meanwhile, judging from the 4 (four) sectors that contributed the largest GDP in 2020, namely the Processing Industry (37.26%), Large Trade and Retail (18.32%), Agriculture (14.79%), and Construction (6.68%), only the Construction sector in 2019 and on average in the last 5 years has not reached SLQ > 1; Even included in the bottom 4 (four) sectors

B. DLQ Calculation Results

By calculation, DLQ is different from SLQ. The fundamental difference is that DLQ uses the basis of sectoral GDP growth rate in its calculations while SLQ does not.

Table 3. DLQ calculation results of Sragen District.

	Sector	Average Sragen (%)	Average Jawa Tengah (%)	DLQ
1	Agriculture, Forestry & Fisheries	1,89	2,00	4,98
2	Mining & Quarrying	3,40	7,48	0,42
3	Processing Industry	7,60	4,49	34,97
4	Electricity & Gas Procurement	3,50	5,16	1,66
5	Water Procurement; Waste Management, Waste, and Recycling	4,97	4,49	8,16
6	Construction	5,16	6,17	3,18
7	Wholesale &; Retail Trade; Car & Motorcycle Repair	5,10	5,82	3,72
8	Transportation & Warehousing	5,25	6,81	2,38
9	Provision of Accommodation & Food & Drink	9,27	7,50	12,39
10	Information & Communication	12,10	11,40	7,24

Sector	Average Sragen (%)	Average Jawa Tengah (%)	DLQ
11 Financial Services & Insurance	6,33	5,51	9,36
12 Real Estate	6,78	6,10	8,41
13 Company Services	9,75	9,84	5,62
14 Government Administration, Defense, and Compulsory Social Security	2,78	3,06	4,37
15 Education Services	7,82	7,42	7,02
16 Health Services & Social Activities	7,33	8,50	3,44
17 Other Services	7,09	9,02	2,47

Source: processed by Researcher, 2023

Based on calculations, almost all sectors (16 sectors) have DLQ numbers > 1 which means that it has the potential for development. Only the Mining and Quarrying sector has $DLQ < 1$, which is 0.42. This is understandable considering that Sragen Regency does not have many natural resources that can be exploited.

The Processing Industry sector has the highest DLQ value reaching 34.97 followed by Accommodation and Food and Drink Provision at 12.39. This indicates that these three sectors have the best prospects in the future seen from their significantly increased growth rate, especially the Processing Industry sector which on average 5 years has not become a base sector, in 2019 it is included in the base sector.

C. SLQ & DLQ Matrix of Sragen Regency

The matrix below is used to illustrate the relationship between SLQ and DLQ values to determine which sectors are prospective base, non-prospective base, non-prospective base, and non-prospective base.

Table 4. SLQ & DLQ Matrix Quadrant Sragen District

Quadrant	DLQ>1 (Prospective)	DLQ<1 (Non-prospective)
SLQ>1 (Base)	<ol style="list-style-type: none"> 1. Agriculture, forestry & fisheries 2. Electricity & Gas Procurement 3. Large and Retail Procurement, Car and Motorcycle Repair 4. Company Services 5. Education Services 6. Other Services 	-
SLQ<1 (Non-Base)	<ol style="list-style-type: none"> 1. Processing Industry 2. Water Procurement, Waste Management, Waste and Recycling 3. Construction 4. Transportation & Warehousing 	<p>Mining and Quarrying</p>

Quadrant	DLQ>1 (Prospective)	DLQ<1 (Non-prospective)
	5. Provision, Accommodation & Food & Drink 6. Information & Communication 7. Financial Services & Insurance 8. Real Estate 9. Government Administration, Land, and Compulsory Social Security 10. Health Services &; Social Activities	

Source: processed by Researcher, 2023

The above quadrant explains as follows:

- 1) Quadrant 1 (SLQ>1 and DLQ>1) explains that the current base sector will still be prospective in the future. Based on the results of the analysis that has been done, there are 6 (six) sectors in this quadrant. These various sectors have the potential to become *winning sectors* in the future so development policies need to be directed to continue to optimize them. The sector in this quadrant has contributed as much as 40% to the formation of the GRDP of Sragen Regency in 2020.
- 2) Quadrant 2 (SLQ<1 and DLQ>1) explains that a sector that is not seeded/non-base at present has prospects for becoming superior/base in the future. The results of the analysis show that the sectors in this quadrant are 10 (ten). A large number of sectors in this quadrant reflects the development of development in Sragen Regency, considering that the majority of existing sectors have the largest contribution share to the GDP of Sragen Regency in 2020 of 57.19%.
- 3) Quadrant 3 (SLQ>1 and DLQ<1) explains a sector that is currently base/superior but has no prospects for future growth. The analysis showed that no sectors were in this quadrant.
- 4) Quadrant 4 (SLQ<1 and DLQ<1) explains that a sector that is not a flagship/non-base sector cannot currently be expected to have good prospects in the future. In Sragen Regency there is only 1 (one) sector in this quadrant, namely Mining and Quarrying, which means it has no prospects to become a leading sector in the future. This could be due to the lack of exploitable natural resources in Sragen District.

D. Shift Share Analysis (SSA) Calculation Results

The results of SSA calculations are outlined in Table 5 below.

Table 5. SSA Analysis Results.

	Sector	Nij	Mij	Cij	Dij
1	Agriculture, Forestry & Fisheries	1.501.321,07	-1.214.520,13	-16.970,14	269.830,80
2	Mining & Quarrying	232.989,49	-57.980,43	-97.923,38	77.085,68
3	Processing Industry	3.066.097,86	-1.701.451,81	1.053.347,00	2.417.993,05
4	Electricity & Gas Procurement	16.113,52	-7.800,69	-2.906,97	5.405,86
5	Water Procurement; Waste Management, Waste, and Recycling	6.779,87	-3.767,86	349,00	3.361,02
6	Construction	631.080,12	-235.893,61	-69.447,22	325.739,28
7	Wholesale & Retail Trade; Car & Motorcycle Repair	1.935.289,77	-796.366,93	-152.240,84	986.682,00
8	Transportation & Warehousing	259.232,77	-78.362,00	-44.697,25	136.173,52
9	Provision of Accommodation & Food & Drink	276.779,02	-61.782,50	57.848,58	272.845,10
10	Information & Communication	144.182,90	35.825,02	13.147,82	193.155,74
11	Financial Services & Insurance	245.922,92	-116.966,49	29.258,42	158.214,86
12	Real Estate	91.258,05	-34.784,79	6.972,71	63.445,98
13	Company Services	37.699,29	2.077,92	-432,52	39.344,69
14	Government Administration, Defense, and Compulsory Social Security	207.386,88	-145.947,10	-5.885,89	55.553,89
15	Education Services	357.874,97	-83.208,57	16.697,63	291.364,03
16	Health Services & Social Activities	67.512,64	-7.250,99	-9.161,01	51.100,64
17	Other Services	157.700,48	-6.971,09	-35.837,63	114.891,76
	Total PDRB	9.235.221,61	-4.515.152,04	742.118,33	5.462.187,90

Source: processed by Researcher, 2023

In general, in the period from 2015 to 2019, the economic growth of Prov. Central Java contributed positively to the GDP growth of Sragen Regency marked by increasing GDP by Rp 9,235 billion. The biggest influence is in the Processing Industry sector (Rp 3,066 M); Agriculture, Forestry, and Fisheries (Rp 1,501 M), Wholesale and retail Trade, Car and

motorcycle Repair (Rp 1,935 M). Meanwhile, in terms of *proportional shift*, it can be seen that there are only 2 (two) sectors, namely Information & Communication and Corporate Services that have a positive value which means they have a high industry mix, while 15 other sectors and total calculations are negative.

In terms of competitive advantage/competitiveness, the total value is positive, which means that Sragen Regency has a competitive advantage over Prov. Central Java. However, this total value was helped by the positive value of 7 (seven) sectors, where the Processing Industry recorded the largest number (Rp 1,053 M) which means that the level of competitive advantage is greater when compared to similar sectors in Central Java Province. Meanwhile, other sectors - 10 (ten) sectors - have negative values which means they have weak competitiveness compared to the same sector in Prov. Central Java. The positive *value of DIJ* in all sectors shows the economic performance of Sragen Regency continues to have growth as seen from its value increase which in total reached Rp 5,462 billion.

The results of this study provide identification of superior sectors/priorities that are different from the RPJMD of Sragen Regency for 2021-2016 in Strategy 1, namely "Increasing production and productivity of the agricultural and fisheries sector" to achieve Target 3.1, namely "Increasing per capita income". Although the potential of agriculture is indeed large, the focus is only heavy on this focus tends to be biased because it does not lift other prospective and competitive base sectors such as Large and Retail Trade, Processing Industry, and several other sectors contained in the SLQ & DLQ quadrant and SSA results. Providing policy focus to industry is very important considering the decline in the percentage of industrial growth in Sragen Regency with a figure of 0.6% in 2020 which previously touched 3.2% in 2019 as stated in the RPJMD. This is caused by the low level of education and skills of workers.

Conclusion

Research that has been conducted shows that 6 sectors are base and prospective and 10 other sectors are currently included in the non-base category but have future development prospects in terms of their high growth rate. Meanwhile, based on the calculation of *Shift-Share analysis*, the Processing Industry has the highest competitiveness compared to other sectors. This research can be an initial study of how regional economic strategies and policies are directed to optimize the potential and opportunities that exist today in the Sragen Regency. This study needs further development, especially in terms of relation to labor absorption and its correlation with poverty alleviation, considering that the increase in GDP cannot necessarily be concluded in line with improving community welfare and reducing poverty. What is contained in this initial research can be a reference from regional development planning that has been stated in Mission 3 of the RPJPD Sragen Regency 2005-2025, namely development based on regional superior potential so that resources and policy instruments can be directed to optimize the identified potential sectors.

References

- Adisasmita, Raharjo. (2008). Regional development: concepts and theories. Yogyakarta: Graha Ilmu.
- Alhawaish, A. K., Alsharikh, M., Alasmal, M., & Alghamdi, Z. (2015). Location Quotient Technique and Economy Analysis of Regions: Tabuk Province of Saudi Arabia as a Case Study. *International Journal of Science and Research (IJSR)*, 4(12), 1756-1761.
- Arrazy, M. (2020). Analisa Location Quotient (LQ) Sektor Akomodasi dan Penyediaan Makanan Minum di Kabupaten/Kota Sumatera Barat. *Jurnal Dinamika Ekonomi Pembangunan (JDEP)*, 3(2), 368-375.
- Alam., et al. (2022). A Sharia Economic Collaboration Model And Its Positive Impact On Developing Of Poor Villages: A Study In Indonesia. *Public And Municipal Finance*, 11(1), 101-112. [https://doi.org/10.21511/pmf.11\(1\).2022.09](https://doi.org/10.21511/pmf.11(1).2022.09)
- Badan Pusat Statistik (BPS). (2020). Kabupaten Sragen Dalam Angka Tahun 2020. Badan Pusat Statistik (BPS).
- Badan Pusat Statistik (BPS). (2021). Kabupaten Sragen Dalam Angka Tahun 2021. Badan Pusat Statistik (BPS).
- Badan Pusat Statistik (BPS). (2020). Provinsi Jawa Tengah Dalam Angka Tahun 2020. Badan Pusat Statistik (BPS).
- Berawi, M. A., Zagloel, T. Y., Perdana, M., & Mulyanto, H. (2017). Producing Alternative Concept for the Trans-Sumatera Toll Road Project Development Using Location Quotient Method. *Procedia Engineering*, 171, 265-273.
- Boguslavskay. (2020). Structure Of Production And Economic Potential Of The Region. *Economics Finance And Management Review*, (2), 16-22. <https://doi.org/10.36690/2674-5208-2020-2-16>
- Diansari, P., Yunus, S. R., Arsyad, M., Lanuhu, N., Jamil, M. H., & Mahyuddin. (2021). Analysis of Agriculture-Based Commodities in Bolaang Mongondow Regency, North Sulawesi, Indonesia. *The 1st International Conference on Environmental Ecology of Food Security*. IOP Conf. Series: Earth and Environmental Sciences.
- Ekowati, T., Prastyo, E., & Mukson. (2020). The Potential Commodities as a Support of Farm Sustainability and Supply Stability in Grobogan Regency. *The 5th International Seminar on Agribusiness 2019*. IOP Conf. Series: Earth and Environmental Science.
- Golovikhin, Sergei. (2021). Competitive potential and socio-economic development of the region.. <https://doi.org/10.15405/epsbs.2021.04.28>
- Hariyoko, Y., & Puspaningtyas, A. (2020). Analisis Pengembangan Sektor Unggulan Kota Surabaya 2013-2018. *Jurnal Ilmu Administrasi Publik*, 5(2), 110-116.
- Hermanto. (2000). Analisis Spesialisasi Regional Propinsi Kalimantan Tengah. *Jurnal Ekonomi dan Studi Pembangunan (JESP)*, 1(1), 45-71.
- Hood, Ron. (1998). Economic Analysis: A Location Quotient. Primer. *Principal Sun Region Associates, Inc.*
- He, dan et al., (2020). Can Industrial Diversification Help Strengthen Regional Economic Resilience?. *Frontiers In Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.987396>

- Head, Keith & Mayer, Thierry. (2010). Gravity, Market Potential And Economic Development. *Journal Of Economic Geography*, 11(2), 281-294. <https://doi.org/10.1093/jeg/lbq037>
- Isabhandia, Y. M., & Setiartiti, L. (2021, February). Basic Sector Analysis and Development Strategy of Regional Economic Potential in Kulon Progo District 2013-2017. *Journal of Economics Research and Social Sciences*, 5(1), 77-87.
- Isserman, A. M. (1977). The Location Quotient Approach to Estimating Regional Economic Impacts. *Journal of the American Institute of Planners*, 43(1), 33-41
- Lu et al., (2022). Research On The Impact Of Technological Finance On Financial Stability: Based On The Perspective Of High-Quality Economic Growth. *Complexity*, 2022, 1-15. <https://doi.org/10.1155/2022/2552520>
- Manullang, D., Rusgiyono, A., & Warsito, B. (2019). Analysis of Aquaculture Leading Commodities in Central Java Using Location Quotient and Shift Share Methods. *ISNPINSA 2018. IOP Conf. Series: Journal of Physics*.
- Maulana, I. N. H., & Wardah, T. F. (2023). Fostering Community Resilience Through Social Capital. *Journal of Transformative Governance and Social Justice*, 1(1), 1-10. <https://doi.org/10.26905/j-tragos.v1i1.9229>
- Miller, Mark M., Gibson, Lay James, & Wright, N Gene. (1991). Location Quotient: A Basic Tool for Economic Development Analysis. *Economic Development Review; Park Ridge*. Vol. 9, Iss. 2. Page. 65.
- Morrissey, K. (2014). A Location Quotient Approach To Producing Regional Production Multipliers For The Irish Economy. *Papers In Regional Science*.
- Mickiewicz, Bartosz. 2022. Analysis Development And Assessment Of The Total Economic Potential Of Companies. *VuzfReview*, 7(3), 57-66. <https://doi.org/10.38188/2534-9228.22.3.06>
- Nurhayati, S. F. (2013). Identifikasi Sektor Unggulan Kabupaten Lamongan: Tahun 2006-2010. *Telaah Bisnis*, 14(1), 27-52
- Pemerintah Kabupaten Sragen. (2020). Rencana Pembangunan Jangka Menengah Daerah (RPJMD) Kabupaten Sragen Tahun 2021-2026. Pemerintah Kabupaten Sragen.
- Priana, W. (2016). Economic Growth Model Location Quotient (LQ) in East Java Province. *Jurnal Ilmu Ekonomi dan Pembangunan (JIEP)*, 16(1), 29-37.
- Puspitaningrum, N., & Sudrajat. (2021). Economic Development of South Coastal Region Purworejo Regency Based on Superior Commodities. *The International Conference on Smart and Innovative Agriculture*. IOP Conf. Series: Earth and Environmental Science.
- Putri et al., (2022). Potential Analysis Of Leading Economic Sector In Economic Development In Nganjuk Regency. *Marginal Journal Of Management Accounting General Finance And International Economic Issues*, 2(1), 29-39. <https://doi.org/10.55047/marginal.v2i1.350>
- Raqib, M., & Rofiuddin, M. (2018). Determination of Leading Sector Sukohargo Regency: Location Quotient and Shift Share Esteban Marquillas Approach. 2(2).
- Rochmatulla et al., (2020). Economic Growth In Indonesian New Autonomous: Social-Economic Perspective. *Jejak*, 13(1), 170-187. <https://doi.org/10.15294/jejak.v13i1.22816>

- Saragih, J. R. (2018). *Perencanaan Wilayah dan Pengembangan Ekonomi Lokal Berbasis Pertanian: Teori dan Aplikasi*. Yogyakarta: Pustaka Pelajar.
- Sihaloho, H., Saragi, C. P., & Simbolon, R. (2018). Analysis of Economic Growth Trends in Various Sector in Toba Samosir District. *International Conference on Agribusiness, Food, and Agro-Technology. IOP Conf. Series: Earth and Environmental Science*.
- Sjafrizal. (2008). *Regional Economics (Theory and Application)*. Padang: Pranita Offset.
- Stimson, R. J., Stough, R. R., & Roberts, B. H. (2006). *Regional Economic Development: Analysis and Planning Strategy*. Springer.
- Tavassoli, Sam & Carbonara, Nunzia. 2014. The Role Of Knowledge Variety And Intensity For Regional Innovation. *Small Business Economics*, 43(2), 493-509. <https://doi.org/10.1007/s11187-014-9547-7>
- Wei et al., (2020). The Coordinated Relationship Between Investment Potential And Economic Development And Its Driving Mechanism: A Case Study Of The African Region. *Sustainability*, 12(1), 442. <https://doi.org/10.3390/su12010442>
- Лубсанова, (2021). Regions of The Zone of Influence of The Great Silk Road and The Tea Road: Strategic Directions for The Development of Economic Potential. *Review of Applied Socio-Economic Research*, 22(2), 102-112. <https://doi.org/10.54609/reaser.v22i2.106>