

Analysis of the Potential Leading Sectors of Cirebon Regency as a Buffer Area in the Rebana Metropolitan Area

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Abstract. *Rebana Metropolitan Area is designed as an economic growth center in the northeastern part of West Java by emphasizing integrated and sustainable investment. Cirebon Regency acts as a buffer zone as well as an Industrial Designation Area (KPI) which has great potential in supporting regional economic growth. This study aims to identify the leading sectors of Cirebon Regency that can be optimized in regional economic development. The method used is quantitative descriptive analysis with the Location Quotient (LQ), Dynamic Location Quotient (DLQ), and Klassen Typology approaches to identify base sectors and prospective sectors. The results of the analysis show that Cirebon Regency has nine basic sectors and eleven prospective sectors that have the potential for further development. Some of the main sectors, such as manufacturing industry, trade, and agriculture, still face challenges of competitiveness and integration with other regions in the Rebana Region. Therefore, a development strategy is needed that focuses on strengthening developing sectors to become leading sectors and encouraging underdeveloped sectors to transform to become more competitive. In conclusion, optimizing the leading sectors in Cirebon Regency can support more sustainable economic growth in the Rebana Metropolitan Area through targeted economic planning.*

Keywords: *metropolitan area, leading Sectors, economic development.*

1. INTRODUCTION

Rebana Metropolitan Area is designed as an economic growth center in the northeast region of West Java by emphasizing integrated, innovative, collaborative, competitive, and sustainable investment. One of the strategic areas in this region is Cirebon Regency which has a role as a buffer area as well as an Industrial Designation Area (KPI) together with Cirebon City (Hartoyo et al., 2023). The position of Cirebon Regency in the Rebana Region is very important because in addition to being a buffer zone in Rebana, it also has advantages, especially in the diverse industrial sector, which is in line with the direction in Presidential Regulation of the Republic of Indonesia Number 87 of 2021. However, in an effort to optimize its role as a buffer zone, a deeper identification of leading sectors that can support sustainable economic growth and make a maximum contribution to the Rebana Metropolitan Area is needed. Cirebon Regency and Cirebon City as KPIs have a special investment focus for potential industrial sectors, such as the food and beverage processing industry, furniture and wood products, shipping, animal feed, non-metallic minerals, building materials, consulting salt processing, and concrete-based hotmix production (Hartoyo et al., 2023).

Although these specialized sectors have developed especially in Cirebon Regency, there are still challenges in terms of competitiveness, integration with other regions in the Rebana

Region, and sustainability in the use of local resources. Therefore, a more in-depth analysis of the potential leading sectors in Cirebon Regency is needed to support more effective and targeted economic development policies. A number of previous studies have discussed economic development strategies in the Rebana Region, but most of them only focus on Cirebon City which is planned as the National Activity Center (Irianto, 2025). In addition, there are studies on the sectoral potential of regencies / cities in Region III Cirebon (A. Fathurrohman, 2014) as well as an analysis of the leading sectors of Cirebon City in 2012-2018 (G. Fathurrohman, 2020). However, specific research on the leading sector of Cirebon Regency as a buffer zone in the Rebana Region is still limited. Therefore, this research is important to explore the condition and potential of the leading sector of Cirebon Regency in the constellation of the Rebana Metropolitan Area more broadly.

2. METHODOLOGY

This research uses a quantitative descriptive method to provide an overview of the characteristics of a data set without drawing generalized conclusions (Sudirman et al., 2023). This method refers to statistical analysis that aims to describe, summarize, and analyze quantitative data. Quantitative data itself is data that can be measured or calculated in the form of numbers, such as age, weight, height, and other variables.

Quantitative descriptive statistical analysis includes various techniques, including measurement of data concentration (mean, median, and mode), measurement of data distribution (range, variance, standard deviation, quartiles, deciles, and percentiles), and measurement of data distribution skewness and kurtosis (Sudirman et al., 2023). The main purpose of this analysis is to present a clear and detailed picture of the data that has been collected, so as to facilitate the interpretation process and support more accurate data-based decision making (Sudirman et al., 2023). This approach is used to measure and analyze secondary Gross Regional Domestic Product (GRDP) data taken from the Central Statistics Agency (BPS) of Cirebon Regency to be able to identify potential leading sectors with several data analysis techniques used, namely Location Quotient (LQ) to be able to provide an overview of the base sector (Tarigan, 2005), Dynamic Location Quotient (DLQ) to be able to provide an overview of prospective sectors and to be able to answer the static nature of LQ analysis (Tarigan, 2009), and Klassen Typology to be able to classify economic sectors as a basis for economic planning (Rustiadi et al., 2011).

3. RESULT AND DISCUSSION

The results of research conducted in Cirebon Regency for 5 years based on GRDP data at constant prices (ADHK) for 2019 - 2023 can be seen in Table 1.

Table 1. ADHK GRDP Data of Cirebon Regency 2019 - 2023 (Billion Rupiah)					
Field of Business	2019	2020	2021	2022	2023
Agriculture, Forestry, and Fisheries	4.485,18	4.563,11	4.559,21	4.741,55	4.640,71
Mining and Quarrying	416,88	417,12	445,47	445,26	445,08
Processing Industry	6.889,05	6.809,81	6.984,48	7.312,38	7.706,10
Electricity and Gas	56,63	54,01	61,28	62,24	65,05
Procurement					
Water Procurement; Waste Management, Waste, and Recycling	28,36	33,19	36,17	37,06	39,64
Construction	4.046,87	3.869,18	4.018,35	4.017,01	4.015,83
Wholesale and Retail Trade; Repair of Cars and Motorcycles	5.242,93	4.874,19	5.036,25	5.151,91	5.256,04
Transportation and Warehousing	2.674,48	2.574,72	2.585,90	2.834,17	3.312,59
Provision of Accommodation and Drinking Food	1.224,37	1.107,58	1.095,73	1.179,80	1.269,89
Information and Communication	1.103,91	1.440,25	1.510,60	1.602,69	1.690,94
Financial Services and Insurance	1.286,47	1.303,60	1.365,38	1.376,98	1.445,45
Real Estate	847,61	858,27	938,10	982,82	1.024,04
Company Services	321,66	288,51	311,93	343,00	373,06
Government Administration, Defense, and Compulsory Social Security	903,40	862,30	854,35	834,58	896,17
Education Services	1.952,55	2.100,66	2.102,32	2.164,28	2.377,38
Health and Social Services	794,03	786,74	844,74	887,38	930,90
Other Services	1.393,72	1.360,82	1.377,24	1.550,66	1.757,71
Gross Regional Domestic Product	33.668,10	33.304,06	34.127,50	35.523,77	37.246,58

Source: Cirebon Regency Central Bureau of Statistics (2024)

From Table 1, it can be seen that the contribution of each business sector in 2023 is dominated by the processing industry sector (20.7%), trade (14.1%), and agriculture (12.25%) as shown in Figure 1. This shows that there is a match between the focus and direction based on Presidential Regulation No. 87 of 2021 with the dominant economic conditions in Cirebon Regency.

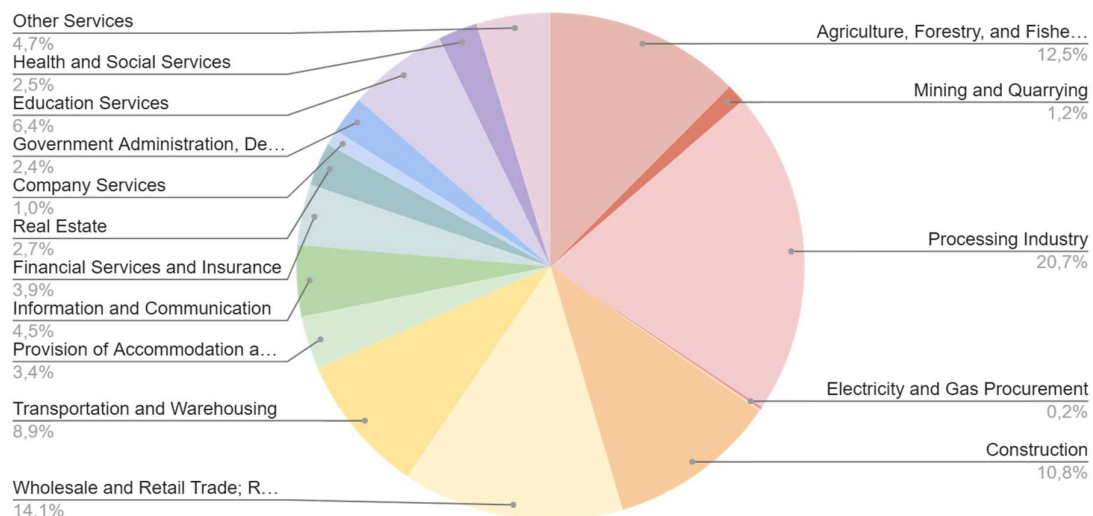


Figure 1. Distribution of GRDP of Cirebon Regency (%) in 2023

Source: Processed from Secondary Data (2025)

To be able to see the superior potential possessed by Cirebon Regency, it is necessary to compare the GRDP value of Cirebon Regency with the Rebana Region using the LQ (Static) and DLQ (Dynamic) approaches. So based on this, the results of the LQ approach are shown in Table 2.

Table 2. LQ Results of Cirebon Regency and Rebana Region

Field of Business	2019	2020	2021	2022	2023	Mean
Agriculture, Forestry, and Fisheries	0,822	0,833	0,827	0,822	0,808	0,82
Mining and Quarrying	0,229	0,251	0,271	0,272	0,278	0,26
Processing Industry	0,854	0,839	0,843	0,851	0,813	0,84
Electricity and Gas Procurement	0,996	0,977	1,020	0,999	1,006	1,00
Water Procurement; Waste Management, Waste, and Recycling	0,922	0,987	0,992	0,971	1,020	0,98
Construction	1,310	1,324	1,285	1,260	1,244	1,28
Wholesale and Retail Trade; Repair of Cars and Motorcycles	0,981	0,969	0,969	0,958	0,944	0,96
Transportation and Warehousing	1,405	1,402	1,403	1,377	1,434	1,40
Provision of Accommodation and Drinking Food	1,160	1,104	1,091	1,057	1,063	1,09
Information and Communication	0,944	0,961	0,954	0,960	0,965	0,96
Financial Services and	1,029	1,040	1,044	1,058	1,091	1,05

Insurance						
Real Estate	1,694	1,720	1,715	1,709	1,707	1,71
Company Services	2,353	2,325	2,337	2,332	2,400	2,35
Government	0,887	0,884	0,889	0,884	0,933	0,90
Administration, Defense, and Compulsory Social Security						
Education Services	1,236	1,280	1,263	1,258	1,320	1,27
Health and Social Services	1,849	1,801	1,815	1,814	1,834	1,82
Other Services	1,829	1,835	1,827	1,842	1,921	1,85

Source: Processed Results (2025)

Information:

- $LQ > 1$ indicates the role of the sector is greater than that of the Rebana Region (Can meet the needs within and outside of Cirebon Regency) (Tarigan, 2009).
- $LQ < 1$ indicates that the role of the sector is smaller than that of the Rebana Region (Can only meet the needs within Cirebon Regency) (Tarigan, 2009).

Based on the LQ approach, it is obtained that Cirebon Regency in the Rebana Region has a basic sector in 9 business field sectors (52.94%) with the highest LQ in the corporate services sector (2.35), other services (1.85), health services and social activities (1.82). In addition, if you review the prospective sectors that are juxtaposed with the Rebana Region, it can be seen in Table 3.

Table 3. DLQ Results of Cirebon Regency and Rebana Region

Field of Business	Cirebon Regency	Rebana Area	DLQ
Agriculture, Forestry, and Fisheries	0,983	0,987	0,996
Mining and Quarrying	0,975	0,945	1,032
Processing Industry	1,003	1,016	0,987
Electricity and Gas Procurement	1,011	1,007	1,004
Water Procurement; Waste Management, Waste, and Recycling	1,061	1,034	1,027
Construction	0,973	0,986	0,987
Wholesale and Retail Trade; Repair of Cars and Motorcycles	0,976	0,986	0,990
Transportation and Warehousing	1,031	1,026	1,006
Provision of Accommodation and Drinking Food	0,986	1,008	0,979
Information and Communication	1,089	1,082	1,006
Financial Services and Insurance	1,004	0,989	1,015
Real Estate	1,022	1,021	1,002
Company Services	1,015	1,009	1,006
Government Administration, Defense, and Compulsory Social Security	0,974	0,961	1,013
Education Services	1,025	1,007	1,017

Health and Social Services	1,015	1,016	0,998
Other Services	1,035	1,022	1,013

Source: Processed Results (2025)

Based on the DLQ approach, it was found that Cirebon Regency in the Rebana Region has prospective sectors in 11 business field sectors (64.71%) with the highest DLQ in the mining and quarrying sector (1.032), water supply; waste management, waste, and recycling (1.027), education services (1.012). The results of the LQ and DLQ analysis indicate that there are other sectors that are superior, both as basic sectors and prospective sectors in the Rebana Metropolitan Area. Therefore, it is necessary to determine the priority sectors in economic development so that the development strategy is more focused, especially in line with the Presidential Regulation of the Republic of Indonesia Number 87 of 2021. The identification of prioritized sectors using the Klassen typology approach can be seen in Table 4. The results will be divided into four quadrants with the following explanation:

- If $LQ > 1$ and $DLQ > 1$ then the sector is classified as a prime sector
- If $LQ > 1$ and $DLQ < 1$ then the sector is classified as a potential sector
- If $LQ < 1$ and $DLQ > 1$ then the sector is classified as a developing sector
- If $LQ < 1$ and $DLQ < 1$ then the sector is classified as a backward sector

Table 4. Hasil DLQ Kabupaten Cirebon dan Kawasan Rebana

	LQ > 1	LQ < 1
DLQ > 1	Quadrant 1 Superior Sector 1. Electricity and Gas Procurement 2. Transportation and Warehousing 3. Financial Services and Insurance 4. Real Estate 5. Corporate Services 6. Education Services 7. Other Services	Quadrant 2 Developing Sector 1. Mining and Quarrying 2. Water Supply; Waste Management, Waste, and Recycling 3. Information and Communication 4. Government Administration, Defense, and Compulsory Social Security
DLQ < 1	Quadrant 3	Quadrant 4

Potential Sector	Underdeveloped Sector
1. Construction	1. Agriculture, Forestry, and Fisheries
2. Provision of Accommodation and Drinking Food	2. Processing Industry
3. Health Services and Social Activities	3. Wholesale and Retail Trade; Repair of Cars and Motorcycles

Source: Processed Results (2025)

Based on the classification using the Klassen Typology approach, it is known that the sectors that are the main focus, as stipulated in the Presidential Regulation of the Republic of Indonesia Number 87 of 2021, are in Quadrant 4, which indicates that they are underdeveloped sectors. To encourage these sectors to develop into potential, developing, and even prime sectors, directed economic planning is needed within a certain period of time. Economic sector development strategies can be formulated through the following strategy matrix (Rahayu, 2010).

Table 5. Economic Sector Development Strategy Matrix

Short Term (1 - 5 Years)	Medium Term (5 - 10 Years)	Long Term (10 - 25 Years)
Prime Sector	Emerging Sector to Prime & Backward Sector to Developing	Emerging Sector becomes Prime

Source: (Rahayu, 2010)

Thus, economic development in Cirebon Regency can be focused on medium-term planning by emphasizing the strengthening of developing sectors so that they can become prime sectors, and encouraging underdeveloped sectors to transform into more developed sectors. Through this strategy, the potential of Cirebon Regency in three leading sectors such as processing industry, trade, and agriculture can be maximally optimized in supporting economic growth in the Rebana Metropolitan Area. However, there are several other things that need to be considered in economic development, one of which is by considering various aspects both internally and externally (Subandi, 2011).

4. CONCLUSIONS

Based on the research results, it can be concluded that Cirebon Regency has great potential in supporting economic growth in the Rebana Metropolitan Area. LQ and DLQ analysis shows that there are nine basic sectors that have competitive advantages as well as eleven prospective sectors that have the potential to grow. However, some key sectors such as manufacturing, trade, and agriculture still face challenges in competitiveness and integration with other regions. Therefore, an appropriate economic development strategy is needed, especially through strengthening developing sectors to become leading sectors and encouraging underdeveloped sectors to be more competitive. With directed economic planning, Cirebon Regency can maximally contribute to sustainable economic development in the Rebana Metropolitan Area.

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