

Analysis of the Structure and Dynamics of Economic Growth in Pohuwato Regency Using *the Location Quotient and Shift Share Approaches*

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Abstract

Regional economic development plays a vital role in improving the quality of life and community welfare, but each region has a distinct economic structure shaped by its potential and characteristics. This study aims to analyze the structure and dynamics of the economy of Pohuwato Regency, Gorontalo Province. This research uses Location Quotient and Shift Share methods, combined with qualitative interviews at Bappeda Pohuwato. The results of the analysis show that Pohuwato's economy is still dominated by the Agriculture, Forestry, and Fisheries sector and the Processing Industry as the base sector. However, the agricultural sector tends to be less competitive, as it relies on raw commodities, whereas the processing industry performs well and is highly competitive. Shift Share analysis reveals a shift to rapidly growing non-base sectors, particularly trade, construction, and health services. This finding confirms the economic transformation in Pohuwato Regency from a traditional, agriculture-based dominance to a more diverse, competitive, and sustainable economic structure, which requires support from downstream and economic diversification strategies.

INTRODUCTION

Regional economic development is an effort to improve the quality of life and well-being of the community. Each region has a distinct economic structure, shaped by its potential and characteristics. Because of these differences, effective and efficient utilization is necessary to support sustainable regional economic growth. (Maspaiteella & Parinussa, 2021) Economic growth is a crucial indicator of a country or region's economic development. One economic indicator that can illustrate the structure of a regional economy is GRDP. The role of various business sectors in producing goods and services determines the structure of a regional economy.

Pohuwato Regency is one of the regions in Gorontalo Province. According to reports (Badan Pusat Statistik Kabupaten Pohuwato, 2024a), the Pohuwato Regency economy grew by 4.40% in 2023, contributing 15.85% to the Gorontalo Province economy. (Badan Pusat Statistik Kabupaten Pohuwato, 2024b) It was found that over the last 5 years (2019-2023), the economic structure of Pohuwato was dominated by three main business sectors: Agriculture, Forestry, and Fisheries at 57.35 percent; Wholesale and Retail Trade, Car and Motorcycle Repair at 12.20 percent; and construction at 6.72 percent.

Findings (Ramadhani & Bouty, 2023). Two sectors play a dominant role as base sectors in Pohuwato Regency: Agriculture, Forestry, and Fisheries, and the processing industry. Although these sectors play a significant role, a deeper understanding is

needed to determine whether they are truly superior in regional performance and competitiveness. (Alatas, 2020) *Shift Share* analysis is an analysis technique that aims to determine economic performance by examining the characteristics of a region's economic structure. Furthermore, *Shift Share analysis* is used to determine the potential and competitiveness of a regional economy (Salakory & Matulesy, 2020) and to analyze the components that determine economic growth in a region over a given period (Taniu et al., 2020).

Some previous studies include (Negara & Putri, 2020). This analysis technique was used to analyze the role of sectors or sector shifts in regions relative to the same sectors in the national economy. The findings (Montanía et al., 2024) suggest that this analysis can contribute to regional analysis, particularly by identifying vulnerable areas that require special attention to minimize the effects of low economic growth. Furthermore, Pasaribu et al. (2020) State that this analysis aims to examine the pattern of economic movement in a region.

Furthermore, Suryani (2019) used *Shift Share* to examine the shift in economic sectors in Central Java following the natural disaster. The analysis showed that shifts occurred in nearly all sectors between 2014 and 2017. (Alatas, 2020), with the results of the analysis showing that the economic structure of the agricultural sector in 2014-2018 influenced the economic performance of West Sumatra Province. Next, (Lv et al., 2021) in their study entitled " *Rural Economic Development Based on Shift-Share Analysis in a Developing Country: A Case Study in Heilongjiang Province, China,* " the results of the analysis showed that the trend of rural economic growth fluctuated wildly for almost 20 years, which was caused by the mismatch of industrial structure with its competitiveness. Similar research was also conducted by Oeliesta (2022), who interpreted the findings as indicating nine progressive sectors and eight conservative sectors (declining). The study, based on Pantu et al. (2023), used a *Shift-Share* analysis and found that the largest MSME industry in Gorontalo City was the processing industry. More broadly (Mahendra et al., 2024) The analysis showed that 11 of the 17 economic sectors (64.7%) had high competitiveness.

Previous research has generally focused on specific sectors or contexts, such as agriculture or livestock, or post-disaster areas. This narrow focus on one or a few sectors provides only a partial picture of the regional economic structure. However, it fails to fully demonstrate the interrelationships among sectors or the dynamics of regional economic growth. Furthermore, some previous research also limits its analysis to relatively short time periods, such as 2014–2017 or 2017–2021. Therefore, the results do not fully reflect the current changes in the economic structure, influenced by post-pandemic socioeconomic dynamics and regional development policies.

Unlike those studies, this study analyzes all economic sectors in aggregate based on Gross Regional Domestic Product (GRDP) data for the past five years (2019–2023). This approach is expected to provide a more up-to-date picture of leading sectors and the dynamics of regional economic growth. With broader sector coverage and a more recent analysis period, this study fills a gap in the literature by presenting a comprehensive analysis of the structure, competitiveness, and shifts of economic sectors at the regional level, a practice not widely explored in previous studies. Furthermore, the use of post-2020 data also allows for the observation of the structural economic effects of the pandemic and regional economic recovery, providing important context for current regional economic studies.

Based on this, the objective of this research is to determine the structure and dynamics of economic growth in Pohuwato Regency using *the Location Quotient* and *Shift Share approaches*. *This approach is expected to enrich empirical studies in regional*

economics, particularly by applying the Shift-Share method more effectively better to understand the structural transformation of the regional economy more comprehensively and contextually, thereby providing a basis for formulating more effective and sustainable regional economic development strategies.

RESEARCH METHODS

Research Location

The primary focus of this research is on Pohuwato Regency, Gorontalo Province.

Types of research

mixed methods study (quantitative and qualitative). The quantitative analysis consisted of calculations for both the LQ and *Shift Share* analyses. The qualitative analysis involved interviews with resource persons at the Pohuwato Regency Regional Development Planning Agency (Bappeda) to obtain more in-depth information related to the research.

Research Procedures

First Stage: Data Collection

Data were collected through primary and secondary methods. Primary data were collected through interviews conducted at the Regional Development Planning Agency of the Pohuwato Regency (Bappeda). Secondary data were obtained from the Pohuwato Regency Central Statistics Agency and the Gorontalo Province Central Statistics Agency, consisting of the 2019-2023 ADHK GRDP document, as well as regional development planning and RPJMD data from Bappeda, as well as references from various libraries, including journals, papers, and articles relevant to the research.

Second Stage: Processing and Analyzing Data

The collected data was then processed and analyzed. The analytical methods used in this study include two parts:

Location Quotient (LQ) Analysis

This analysis identifies the leading sectors in Pohuwato Regency by comparing its GRDP with that of Gorontalo Province.

$$LQ = \frac{v_i/v_t}{y_i/y_t} \dots\dots\dots(1)$$

Vi: Value of GRDP of sector i at the lower regional level (Pohuwato Regency); Vt: Total GRDP of sector i at the lower regional level (Pohuwato Regency); Yi: Value of GRDP of sector i at the higher regional level (Gorontalo Province); Yt: Total GRDP of sector i at the higher regional level (Gorontalo Province)

Interpretation:

If the LQ value ≥ 1 , the sector is a leading sector; if the LQ value ≤ 1 , the sector is not a leading sector.

2. Shift Share Analysis

The purpose of this analysis is to determine the performance or productivity of the regional economy compared to the economy at the regional or national level (Setiajatinika & Dwi Astuti, 2022). The analytical equation is as follows (Meliana et al., 2024):

$$D_{ij} = N_{ij} + M_{ij} + C_{ij} \dots\dots\dots(2)$$

Dij: Change in GRDP of sector i in the observed region (Pohuwato Regency); Nij: Change in GRDP of sector i in the observed region (Pohuwato Regency) is caused by the influence of economic growth in the wider region (Gorontalo Province); Mij: Change in GRDP of sector i in the observed region (Pohuwato Regency) is caused by the influence of growth in sector i on the broader region (Gorontalo Province); Cij: Change in GRDP of sector i in the observed region (Pohuwato Regency) is caused by the competitive advantage of sector i on the broader region (Gorontalo Province)

To calculate the components Nij, Mij, and Cij above, they can be calculated using the following equation (Kasikoen, 2018):

$$Nij = Eij \times rn \dots\dots\dots(3)$$

$$Mij = Eij \times (rin - rn) \dots\dots\dots(4)$$

$$Cij = Eij \times (rij - rin) \dots\dots\dots(5)$$

Eij: GRDP of sector i in the observed region (Pohuwato Regency) in the initial year of analysis; Ein: GRDP of sector i on the broader region (Gorontalo Province); En: total GRDP on the broader region (Gorontalo Province) in the initial year of analysis; Eij,t: GRDP of sector i in the observed region (Pohuwato Regency) in the final year of analysis; Ein,t: GRDP of sector i on the broader region (Gorontalo Province) in the final year of analysis; En,t: total GRDP of reference (Gorontalo Province) in the final year of analysis

Results and Discussion

Location Quotient Analysis

This research variable comprises 17 business sectors. Based on the LQ analysis results, only two sectors had an LQ value ≥ 1 : Agriculture, Forestry, and Fisheries, and the Manufacturing Industry. Meanwhile, the other 15 sectors had an LQ value ≤ 1 . As Ronsumbre et al. (2023) stated, if the LQ value is ≥ 1 , it means the level of specialization of the sector is greater than that of the same sector in the economy at a larger level. In other words, the Agriculture, Forestry, and Fisheries, as well as the Processing Industry, are key sectors with the potential to develop into drivers of the Pohuwato Regency economy. Conversely, if the LQ value is ≤ 1 , the sector is not basic and has less potential to drive the Pohuwato Regency economy. (Rahmadana, 2023) He stated that by understanding a region's core sectors, the government can strengthen these sectors and expand their influence over other sectors, thereby increasing regional economic growth. Furthermore, according to Priatna et al. (2025) by understanding the concentration of economic sectors, economic planners can more effectively allocate resources and formulate future development strategies. Table 1 presents the LQ results for each sector in the 2019-2023 ADHK GRDP of Pohuwato Regency.

Table 1. Results of LQ Analysis of Pohuwato Regency

Business Field	LQ					Average LQ	Note
	2019	2020	2021	2022	2023		
Agriculture, Forestry, and Fisheries	1,546	1,552	1,557	1,558	1,522	1.54	Base
Mining and Quarrying	0.712	0.713	0.724	0.731	0.694	0.71	Non-Basic

Processing industry	1,032	1,065	1.0617	1,068	1,056	1.05	Base
Electricity and Gas	0.928	0.876	0.887	0.893	0.900	0.89	Non-Basic
Procurement							
Water Supply, Waste Management, Waste and Recycling	0.514	0.518	0.519	0.519	0.495	0.51	Non-Basic
Construction	0.542	0.544	0.545	0.564	0.581	0.55	Non-Basic
Wholesale and Retail Trade; Car and Motorcycle Repair	0.940	0.953	0.949	0.958	1,056	0.97	Non-Basic
Transportation and Warehousing	0.569	0.578	0.578	0.552	0.547	0.56	Non-Basic
Provision of Accommodation and Food/Drink	0.509	0.515	0.509	0.507	0.522	0.51	Non-Basic
Information and Communication	0.495	0.497	0.492	0.477	0.462	0.48	Non-Basic
Financial Services and Insurance	0.510	0.517	0.526	0.520	0.516	0.51	Non-Basic
Real Estate	0.464	0.467	0.478	0.483	0.483	0.47	Non-Basic
Corporate Services	0.953	0.966	0.968	0.950	0.945	0.95	Non-Basic
Government Administration, Defense, and Mandatory Social Security	0.656	0.656	0.657	0.655	0.657	0.65	Non-Basic
Educational Services	0.537	0.539	0.532	0.526	0.527	0.53	Non-Basic
Health Services and Social Activities	0.664	0.666	0.664	0.699	0.691	0.67	Non-Basic
Other Services	0.693	0.706	0.704	0.72	0.695	0.70	Non-Basic

These findings confirm the conclusions of previous research by [1] ([Ramadhani & Bouty, 2023](#)), which found that the Agriculture, Forestry, and Fisheries and Manufacturing Industry sectors are more prominent and have greater potential than other sectors in Pohuwato Regency. ([Firdaus et al., 2025](#)) This potential is supported by geographical conditions, land availability, job availability, and technology. According to ([Rencana Pembangunan Jangka Menengah Daerah Kabupaten Pohuwato Tahun 2025-2029, 2025](#))[1], developing this potential must include improving agricultural infrastructure, such as building and improving irrigation, road access to agricultural land, and harvest storage facilities. Furthermore, training and counseling for farmers to adopt more efficient and sustainable farming practices are essential. Market and commodity development are also important, as they expand market access for agricultural and plantation products and develop processed products to

increase added value. Crop diversification is also necessary to reduce the risk of crop failure and price fluctuations.

This finding is supported by (Ramadhani, 2024) the fact that Pohuwato Regency has diverse natural resource potential, including forestry potential where spatially the direction of the function of the Pohuwato Regency forest area is an area with a protected function with an area of 214866.11 Ha (49.43%), the buffer area (limited production forest) has an area of 1511918.76 Ha (34.95%), while the cultivation area (permanent production forest) has an area of 67887.34 Ha (15.61%).

Data shows that Pohuwato's economy remains heavily dependent on the agricultural sector. This high dependence on the agricultural sector can pose risks to the economic sustainability of Pohuwato Regency. Excessive reliance on a single sector makes the regional economy vulnerable to fluctuations in commodity prices and climate risks. Based on the Rencana Pembangunan Jangka Menengah Daerah Kabupaten Pohuwato Tahun 2025-2029 (2025), too much focus on the agricultural sector can hinder economic diversification and the development of other sectors with significant growth potential. Therefore, while strong GRDP growth is positive, Pohuwato Regency should focus on economic diversification to reduce its dependence on the agricultural sector. This diversification can be achieved by developing other sectors, such as industry, tourism, or services, which have higher growth potential. Furthermore, investment in infrastructure and human resource development is also crucial to support sustainable economic growth in Pohuwato Regency.

Furthermore, Ramadhani & Bouty (2023) stated that factors can influence a region's production capacity, citing the Solow Growth Model: technological progress, capital accumulation, and absorbed labor. Determining the leading sectors is important to analyze because it can serve as a basis for regional development planning aligned with the Decentralization policy, allowing regions to formulate policies based on their regional potential to accelerate economic development that impacts the welfare and prosperity of the community.

Shift Share Analysis

Furthermore, Susilo (2023) conducted a Shift-Share analysis to examine the economic performance and competitiveness of these sectors. The results of the *Shift Share* analysis can provide policymakers with information to identify sectors or industries with development potential, as well as strategies to increase regional economic growth (Rahmadana, 2023). The analysis spans two years, with 2019 as the initial year and 2023 as the final year. The following presents the data from the *Shift Share analysis* conducted.

Table 2. Results of the Shift Share Analysis of Pohuwato Regency

Business Field	rij	Rin	rn	Nij	Mij	Cij	Shift Share
Agriculture, Forestry, and Fisheries	0.05	0.07	0.10	267,189	-87.50	-46.90	132.78
Mining and Quarrying	0.10	0.13	0.10	3,861	0.975	-1.166	3.67
Processing industry	0.18	0.15	0.10	19,429	9,993	4.8273	34.25
Electricity and Gas	0.25	0.29	0.10	0.337	0.650	-0.137	0.85
Procurement							

Water Supply, Waste Management, Waste and Recycling	0.03	0.07	0.10	0.150	-0.048	-0.061	0.04
Construction	0.21	0.13	0.10	26,983	8,133	21,113	56.23
Wholesale and Retail Trade; Car and Motorcycle Repair	0.25	0.11	0.10	51,423	7,359	70,237	129.02
Transportation and Warehousing	0.06	0.11	0.10	15,023	0.866	-6,619	9.27
Provision of Accommodation and Food/Drink	0.17	0.14	0.10	5,511	2,195	1,472	9.18
Information and Communication	0.14	0.23	0.10	7,480	9,406	-6.146	10.74
Financial Services and Insurance	0.09	0.08	0.10	9,247	-1,801	1,003	8.45
Real Estate	0.04	0.00	0.10	4,210	-4,339	1,629	1.5
Corporate Services	-0.01	0.00	0.10	0.411	-0.421	-0.039	-0.05
Government Administration, Defense, and Mandatory	0.08	0.08	0.10	22,067	-4,668	0.060	17.46
Social Security							
Educational Services	0.15	0.17	0.10	11,010	7,477	-2,457	16.03
Health Services and Social Activities	0.20	0.15	0.10	11,688	5,765	5,425	22.88
Other Services	0.04	0.03	0.10	5,161	-3,358	0.076	1.88

Based on the analysis results table above, it can be explained that the sector with the most considerable NIJ value is Agriculture, Forestry, and Fisheries with a value of 267.19, second is the Wholesale and Retail Trade sector, Car and Motorcycle Repair with a value of 51.42, while third with a value of 26.98 is the Construction sector. The NIJ value itself indicates national economic growth; in this case, it is used to compare Gorontalo Province with the national average.

Next is Mij (Sectoral growth), or a value that shows the influence of sector growth at the provincial level on the growth of the same sector in Pohuwato Regency. Where, if it is positive, the sector is growing faster than the average of all sectors at the provincial level, and if it is negative, the sector is growing slower than the average of all sectors at the provincial level (Rizani, 2020). Based on the table above, it is known that there are seven sectors with negative values, namely 1) in the Water Supply, Waste Management, Waste, and Recycling sector with a value of -0.04, 2) Corporate Services with a value of -0.42, 3) Financial Services and Insurance with a value of -1.80, 4) Other services with a value of -3.35, 5) Real Estate with a value of -

4.33, 6) Government Administration, Defense, and Mandatory Social Security with a value of -4.66, 7) Agriculture, Forestry, and Fisheries with a value of -87.51. The seven sectors at the provincial level tend to grow more slowly, which has a negative influence on Pohuwato Regency. Meanwhile, the other 10 sectors have positive values, indicating faster growth rates than the provincial-level economic sector in Gorontalo.

Third, Cij (Competitiveness Growth) is a value that indicates local competitive advantage. Where a positive value indicates that the sector in Pohuwato Regency is growing faster than the same sector at the provincial level, suggesting local competitiveness. Based on the table above, nine sectors have positive values and a good level of competitiveness, while the other 8 have negative values or are declining in competitiveness. The sectors with the most significant positive Cij values are 1) the Wholesale and Retail Trade sector, with a value of 70.23, 2) the Construction sector, with a value of 21.11, and 3) Health Services and Social Activities, with a value of 5.42. These three sectors are the most progressive and the most competitive. Meanwhile, the Agriculture, Forestry, and Fisheries sector is indicated to have low competitiveness, although its contribution is significant, its growth rate is lower than the provincial average.

Shift Share value is obtained from a combination of the Nij, Mij, and Cij components. The analysis results show that there are five sectors with high performance and economic growth, including the Agriculture, Forestry and Fisheries Sector; Wholesale and Retail Trade; Car and Motorcycle Repair; Construction; Manufacturing Industry; Health Services; and Social Activities. Meanwhile, five sectors with slow economic performance and growth include Corporate Services, Water Supply, Waste Management, Waste and Recycling, Electricity and Gas Supply, Real Estate, and Other Services.

DISCUSSION

Economic Structure with *Location Quotient Approach*

Two sectors still dominated the economic structure of Pohuwato Regency during the 2019-2023 period. The first basic sector is Agriculture, Forestry, and Fisheries, with an LQ value of ≥ 1 . This indicates that this sector has a significant contribution to economic growth in Pohuwato Regency. This sector's dominance is reinforced by geographic conditions, land availability, and the absorption of the local workforce.

Although structurally a basic sector, it tends to grow slowly. This condition is influenced by production patterns in which exported commodities remain raw materials, without processing, resulting in suboptimal added value. Furthermore, a relatively high dependence on raw commodities impacts market price fluctuations and the risk of climate change. Therefore, a strategy is needed to strengthen competitiveness through technological modernization, such as downstreaming, infrastructure improvements, and integration with the manufacturing sector, so that this sector can achieve its best performance and fully contribute to economic growth in Pohuwato Regency.

In line with this, according to [Wahyudi et al. \(2024\)](#), efforts to maintain and improve competitiveness and export opportunities include increasing product production through downstreaming policies. Furthermore, downstreaming policies are structural policies aimed not only at strengthening efforts to increase added value and productivity but also at supporting economic stability. Studies show that downstreaming food through agriculture, plantations, and fisheries can support price stability, encourage national food security, promote economic growth, and improve

the economic structure (Bank Sentral Republik Indonesia, 2023). However, according to Akhmadi (2024), the downstreaming strategy requires significant investment and long-term research, so government policy to regulate this strategy is essential.

The second basic sector is the Manufacturing Industry. This sector not only has an LQ score of ≥ 1 but also relatively good growth and competitiveness. This sector is dynamic and leading, with potential for continued growth. These results emphasize the importance of the processing industry as a new economic driver that can increase added value while reducing regional dependence on the primary sector.

Economic Growth Dynamics with *the Shift Share Approach*

Shift Share analysis results show that the Agriculture, Forestry, and Fisheries sector continues to contribute significantly to economic growth, with a high Nij value, but negative Mij and Cij values. This value indicates that despite its significant contribution, its growth rate is slow and its competitiveness is relatively low. This interesting finding reinforces the need for the Agriculture, Forestry, and Fisheries sector to be directed towards downstreaming and diversification so that it is not only structurally dominant but also competitive.

In contrast to the Agriculture, Forestry, and Fisheries sectors, the Manufacturing Industry sector demonstrated more progressive performance. The positive results for the Nij, Mij, and Cij components indicate this. This indicates that the Industrial sector has the potential to be a driving force for Pohuwato's future economic growth.

An interesting finding from this analysis is that non-basic sectors actually show rapid growth. For example, in the Wholesale and Retail Trade sector, Car and Motorcycle Repair, despite an LQ value < 1 , has a very high *Shift Share value* (129.02), even surpassing that of the Manufacturing Industry sector. This indicates that trade is one of the most dynamic sectors, with rapid growth and good competitiveness, so it has the potential to develop into a new leading sector. Furthermore, the Construction sector also shows progressive performance with a *Shift Share value* of 56.23, which confirms its important role in infrastructure development and its contribution to driving cross-sector economic activity.

The services sector, particularly Health Services and Social Activities, demonstrated strong competitiveness, as evidenced by a positive Cij value. This value indicates increasing public demand for health services and a better quality of life.

Overall, the *Shift Share analysis* reveals a shift in economic growth dynamics in Pohuwato Regency, from a traditional agricultural sector to more progressive and competitive sectors such as processing, trade, construction, and services. This finding aligns with the development direction outlined in the 2025-2029 Pohuwato Regency Medium-Term Development Plan (RPJMD), particularly Mission 2: Improving the quality of the community's economy and regional investment, through a strategy to accelerate competitiveness, investment development, and the development of an integrated and Fast-Growing Area (KATUPAT). This policy direction is expected to maximize the utilization of Pohuwato's superior natural resources in an environmentally friendly manner, increase land productivity, develop food areas, support community welfare, and contribute to national food self-sufficiency.

CONCLUSION

Based on the analysis, it can be concluded that the economic structure of Pohuwato Regency during the 2019–2023 period is still dominated by the Agriculture, Forestry, and Fisheries sectors and the Processing Industry, which are considered basic sectors, but both exhibit distinct dynamics. The Agriculture sector, although making the most significant contribution to GRDP, tends to be less

competitive because it still relies on raw material exports, whereas the Processing Industry sector appears as a dynamic, leading sector with high growth and competitiveness. The *Shift Share analysis* also confirms a shift toward progressive non-basic sectors, particularly Trade, Construction, and Health Services, which are growing rapidly and have the potential to become new economic drivers.

These findings indicate the economic transformation of Pohuwato Regency from a traditional agricultural-based dominance to a more diverse, competitive, and sustainable structure. Furthermore, this dynamic aligns with the direction of regional development as outlined in the 2025–2029 Pohuwato Regency Medium-Term Development Plan (RPJMD), specifically Mission 2, which focuses on improving the quality of the community's economy and regional investment. The strategies adopted, such as accelerating competitiveness, developing investment, and developing Fast-Growing Areas (KATUPAT) in an integrated manner, demonstrate the local government's commitment to encouraging the downstreaming of superior resources, increasing land productivity, and supporting the development of food zones.

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BIBLIOGRAPHY

- Akhmadi, F. (2024). Analysis of the Impact of Downstreaming on Economic Growth in Indonesia. *Hatta: Journal of Economic Education and Economics*, 2 (1), 25–31. <https://doi.org/10.62387/hatta.v2i1.18>
- Alatas, A. (2020). Analysis of Shift Share of Livestock in Tanah Datar Regency, West Sumatra Province. *Journal of Agribusiness*, 22 (1), 137–146.
- Central Statistics Agency of Pohuwato Regency. (2024a). *Official Statistical News: Economic Growth of Pohuwato Regency in 2023*.
- Central Statistics Agency of Pohuwato Regency. (2024b). *Gross Regional Domestic Product of Pohuwato Regency by Industrial Sector 2019-2023* (Vol. 10).
- Central Bank of the Republic of Indonesia. (2023). *Indonesian Economic Report: Synergy Strengthens National Economic Resilience and Revival*.
- Firdaus, AA, Gunawan, DS, Bawono, IR, & Susanto, HA (2025). Analysis of the Regional Superior Product (PUD) Sector in Agricultural Products in the Economic Structure of Tangerang Regency. *Ecoducation: Economics and Education Journal*, 7 (1), 107–121.
- Kasikoen, KM (2018). Shift Share Analysis for Regional Planning (Case Study – Bogor Regency). *Scientific Forum*, 15 (3), 442–448.
- Lv, D., Gao, H., & Zhang, Y. (2021). Rural Economic Development Based on Shift-Share Analysis in a Developing Country: A Case Study in Heilongjiang Province, China. *Sustainability*, 13 (4), 1969. <https://doi.org/10.3390/su13041969>
- Mahendra, Z., Fitriana, W., & Yuerlita, Y. (2024). Dynamics and Competitiveness of the Agricultural Sector in Padang Pariaman Regency, West Sumatra. *Indonesian*

Journal of Agricultural Sciences, 29 (3), 461–469.
<https://doi.org/10.18343/jipi.29.3.461>

- Maspaitella, M., & Parinussa, SM (2021). Applying Location Quotient and Shift-Share Analysis in Determining Leading Sectors in Teluk Bintuni Regency. *Journal of Developing Economies*, 6 (1), 55. <https://doi.org/10.20473/jde.v6i1.22182>
- Meliana, C., Indriani, F., & Firdaus, QA (2024). Study of the Economic Sector and Development Strategy of the Rebana Metropolitan Area. *Gorontalo Development Review*, 7 (2), 180–195.
- Montanía, C.V., Márquez, M.A., Fernández-Núñez, T., & Hewings, G.J.D. (2024). Toward A More Comprehensive Shift-Share Analysis: An illustration using Regional Data. *Growth and Change*, 55 (1). <https://doi.org/10.1111/grow.12693>
- Negara, AKK, & Putri, AK (2020). Analysis of Leading Sectors in Toboali District Using Shift Share and Location Quotient Methods. *Equity: Journal of Economics*, 8 (1), 24–36. <https://doi.org/10.33019/equity.v8i1.11>
- Oeliestina, O. (2022). Observing the Shift in East Java's Economic Structure During the Covid-19 Pandemic with Shift Share Analysis. *JAE (Journal of Accounting and Economics)*, 7 (3), 68–79. <https://doi.org/10.29407/jae.v7i3.18502>
- Pantu, HA, Dai, SI, & Santoso, IR (2023). Mapping the Potential and Development Strategy of MSMEs in Gorontalo City. *Journal of Development Economics*, 5 (2), 31–39.
- Priatna, I., Widada, R., Fitriani, & Atmaja, U. (2025). *Regional Development* (E. Damayanti, Ed.). Widina Media Utama.
- Pasaribu, E., Anitasari, M., Gunawan, R., Ekaputr, RA, & Putri, NT (2020). Shift Share Analysis on the Transformation of the Agricultural Sector in the Regional Economy in Bengkulu. *Jurnal Ekonomi-Qu*, 10 (2), 129. <https://doi.org/10.35448/jequ.v10i2.9557>
- Rahmadana, M. (2023). *Regional and Urban Economics Reference Book* (R. Kusumawati, Ed.; First). CV. Mega Press Nusantara.
- Ramadhani, BS (2024). Spatial Analysis of Forest Area Function Directions in Pohuwato Regency, Gorontalo Province. *LaGeografia*, 22 (3). <https://doi.org/10.35580/lageografia.v22i3.62515>
- Ramadhani, BS, & Bouty, RF (2023). Analysis of Leading Sectors Using the Location Quotient (LQ) Method in Pohuwato Regency. *Research Journal of Accounting and Business Management*, 7 (2), 152. <https://doi.org/10.31293/rjabm.v7i2.7297>
- Pohuwato Regency Medium-Term Regional Development Plan (2025-2029)*. (2025).
- Rizani, A. (2020). Analysis of the Potential of Leading Sectors for Economic Development Planning in Malang City. *Journal of Developing Economies*, 5 (1), 21. <https://doi.org/10.20473/jde.v5i1.18547>
- Ronsumbre, JP, Yap, RA, & Mansim, N. (2023). Analysis of Economic Potential and Structure Using the Location Quotient (LQ) and Shift-Share (SS) Approaches in Manokwari Regency 2014-2018. *Economic Lens*, 17 (1), 1–16.
- Salakory, H., & Matulesy, F.S. (2020). Shift-Share Analysis of the Sorong City Economy. *BAREKENG: Journal of Mathematics and Applied Sciences*, 14 (4), 575–586. <https://doi.org/10.30598/barekengvol14iss4pp575-586>

- Setiajatnika, E., & Dwi Astuti, Y. (2022). Potential of Regional Superior Products and Their Development Strategies in Aru Islands Regency. *Coopetition: Scientific Journal of Management*, 13 (1), 97–114. <https://doi.org/10.32670/coopetition.v13i1.1243>
- Suryani, AS (2019). Analysis of Location Quotient and Shift Share After Natural Disasters in Central Java Province. *Jurnal Kajian*, 24 (1), 57–74.
- Susilo, FP (2023). *Regional Development Planning*. Brawijaya University Press.
- Taniu, S., Yakup, AP, & Novriansyah, MA (2020). Shift Share Analysis to Determine the Sectoral Performance of the Gorontalo Regional Economy. *Gorontalo Development Review*, 3 (2), 102. <https://doi.org/10.32662/golder.v3i2.1088>
- Wahyudi, Widyastuti, R., S., RT, & Gunawan, E. (2024). Strategy for Increasing Competitiveness, Product Downstreaming, and Export Opportunities for Bird's Nest in Indonesia. *Journal of Agricultural Development Planning*, 1 (1), 49–63.