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ANALYSIS OF DEVELOPMENT INEQUALITY AND POTENTIAL SECTORS IN THE SUBOSUKAWONOSRATEN STRATEGIC AREA DURING THE 2019-2023 PERIOD

Jiddan Nawfal Hidayat[1], Nenik Woyanti[2]
Economics, Diponegoro University, Indonesia
E-mail: jespjournal@gmail.com, neniwoyanti346@gmail.com

Abstract

Subosukawonosraten is a strategic area in Central Java Province designed to encourage economic growth and equitable development among its regencies/cities. However, inequality remains a significant issue, particularly the disparity in income and growth rates between the core city and its surrounding areas. This study aims to examine the phenomenon of uneven development influenced by the availability of economic resources between regions, and to classify the leading economic sectors in each regency/city.

This study uses secondary data from regencies/cities in the Subosukawonosraten area for the 2019-2023 period, taken from the Central Java Provincial Statistics Agency (BPS). The analysis methods used include the Williamson Index and the Theil Index to measure inequality based on GRDP and population, while the Location Quotient (LQ) and Shift-Share were used to analyze and categorize potential sectors in each region.

The results indicate that the level of disparity in Subosukawonosraten regencies/cities during 2019-2023 tended to be moderate to high, and continued to rise steadily until the end of the period. The economic sectors that contribute most to the regional GRDP include agriculture in Wonogiri and Sragen Regencies; manufacturing in Sukoharjo, Sragen, and Klaten Regencies; and wholesale and retail trade in Surakarta City and Sukoharjo Regency.

Keywords: *Development inequility, potential economic sectors, and economic growth*
JEL Classification:

INTRODUCTION

Economic development is a crucial process in improving public welfare. The success of development is usually measured through economic growth, reflected in increased output and community income. However, in practice, economic growth does not always occur evenly across regions. Some regions are able to grow faster, while others lag behind due to limited resources, infrastructure, and human resource quality.

In the era of regional autonomy, each regional government has greater authority to manage its region's economic potential. This autonomy is expected to encourage regions to be more independent and creative in developing leading economic sectors. However, differences in capacity between regions have given rise to new problems in the form of inter-regional development inequality. Regions with better access to infrastructure, substantial capital, and high-value-added economic sectors tend to develop faster than regions that still rely on traditional primary sectors.

Central Java Province is one of the provinces facing the problem of inter-regional development inequality. One strategic area of interest to study is the Subosukawonosraten area. This area was designated as a strategic area with the aim of accelerating regional economic growth through cooperation between regencies/cities. Surakarta City serves as a growth center (core city) expected to have a spillover effect on surrounding areas.

However, data shows that the difference in per capita GRDP between Surakarta City and its supporting districts remains significant. This indicates that the benefits of development have not been fully felt equally by all areas within the region. Furthermore, the economic structures of each region within the Subosukawonosraten area also vary, ranging from those dominated by the agricultural sector to those developing through the manufacturing and service industries.

These differences in economic structures have the potential to widen development disparities if not balanced with appropriate sectoral development policies. Therefore, it is important to examine the extent of development disparities and which economic sectors actually have significant potential for development as drivers of economic growth in each region.

METHOD

The analysis was conducted in several stages. First, the Williamson and Theil Index was used to measure regional aggregate inequality and the decomposition between regions (e.g., Surakarta's contribution compared to other districts). Second, the Location Quotient (LQ) is used to analyze sector specialization (LQ >1 indicates base, 0.8 -1.0 indicates potential). Third, Shift Share analysis is used to examine the performance and competitiveness of each region's economic sectors.

The use of different analytical methods aims to provide more convincing insights and results in assessing the significance of disparities between regions, as well as to facilitate the grouping of economic sectors deemed superior and competitive.

The analysis instruments used for measurement:

1. ***Williamson Index***

$$IW = \sqrt{\sum_{i=1}^{n} \left(\frac{fi}{n}\right) (Yi - \bar{Y})^2}$$

The Williamson Index was developed by Williamson (1965), and its value ranges from 0 to 1. Values closer to 0 indicate greater equality, while values closer to 1 indicate greater inequality.

The Williamson Index is used to provide a general overview of the level of development inequality in the Subosukawonosraten area as a whole. The results of the Williamson Index calculation, which falls within the medium to high range, indicate that regional economic growth remains concentrated in certain areas, particularly Surakarta City.

2. ***Entropi Theil Index***

$$IT = \sum_{i=1}^{n} \frac{Yi}{Y} ln\left(\frac{\frac{Yi}{Y}}{\frac{Pi}{P}}\right)$$

This method is similar to the Williamson Index, offers greater accuracy because it measures the level of income inequality by comparing the proportion of

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income and population in each region. The Theil Index's primary advantage over the Williamson Index lies in its ability to break down each region's contribution to total inequality.

3. ***Location Quotient (LQ)***

$$LQ = \frac{ABxy/_{ABy}}{CDxy/_{CDy}}$$

The LQ compares the role of a sector in a regional economy against the role of the same sector in the economy of a reference region, namely the provincial or national level. An LQ value >1 indicates basic specialization, where the sector has a comparative advantage and has the potential to become a leading regional sector. An LQ value <1 indicates non-basic specialization, serving only as a supporting sector to existing basic sectors in a region.

The LQ analysis was used to determine the sectoral specialization of each district/city in the Subosukawonosraten area. The results of the LQ analysis indicate clear differences in economic structure between regions, which is crucial for explaining the relationship between regional economic structure and the level of regional development inequality.

4. ***Shift Share***

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

This method divides economic growth into three elements: National Share (Nij), Proportional Shift (Mij), and Differential Shift (Cij). This integrated framework explains how sectoral imbalances exacerbate disparities. The use of all three has its own purposes and interpretations. National share (Nij) indicates overall economic growth in the study area and will always be positive if the regional economy is growing.

Proportional shift (Mij) provides an indication of whether an economic sector is growing rapidly or slowly in a region. Finally, differential shift (Cij) indicates whether an economic sector has strong or weak competitiveness regionally or nationally. The combination of these three then forms Dij, which interprets whether a sector experienced growth during the study period, provided Dij > 0. If Dij < 0, the sector experienced decline.

Shift Share itself is used to complement the results of the LQ analysis by assessing the sectoral competitiveness of each region within the Subosukawonosraten Area, with the aim of providing a deeper understanding of the dynamics of sectoral growth and its implications for regional development inequality.

RESULTS AND DISCUSSION

General Overview of the Subosukawonosraten Area

The Subosukawonosraten area comprises Surakarta City as the main growth center and six buffer districts: Boyolali, Sukoharjo, Karanganyar, Wonogiri, Sragen, and Klaten. Functionally, Surakarta City serves as the center of economic activity, trade, services, education, and government, while the surrounding districts serve as supporting areas with diverse economic characteristics.

These differences in characteristics are reflected in the structure of each region's GRDP. Surakarta City is dominated by the tertiary sector, such as wholesale and retail trade, *transportation, accommodation, and other services. Conversely, several buffer districts still have significant contributions from the primary sector, particularly agriculture. This situation demonstrates economic specialization between regions, which has the potential to strengthen regional cooperation but also potentially create inequality if not managed in an integrated manner.*

Development Inequality Analysis

The Williamson Index calculation results indicate that the level of development inequality between districts/cities in the Subosukawonosraten area during the 2019–2023 period is in the medium to high category. The increasing index value indicates that the development gap between regions has not been significantly reduced.

Surakarta City has a significantly higher GRDP per capita than its buffer districts. This condition indicates a concentration of economic activity in growth centers. This phenomenon aligns with the theory of regional development inequality, which states that in the early stages of development, economic activity tends to be concentrated in certain regions with advantageous locations, infrastructure, and market access.

The Williamson Index measurement results indicate that during the 2019–2023 period, the level of development inequality in the Subosukawonosraten area was in the medium to high category. The Williamson Index value fluctuated but tended to increase, from 0.3814 in 2019 to 0.4090 in 2023, with an average value of 0.4016. This figure indicates that the distribution of GRDP per capita among regencies/cities in the region is uneven and indicates a tendency toward concentration of economic activity in certain areas.

The increase in the Williamson Index indicates that regional economic growth has not been accompanied by equitable distribution of development outcomes. Surakarta City, as the growth center, experienced a relatively faster increase in GRDP per capita than its buffer regencies. This condition widens the income gap between regions and reinforces the centralized development pattern.

The Williamson Index findings are supported by the Theil Entropy Index analysis, which showed an average value of 0.0313 during the study period. The Theil Index value increased from 0.0282 in 2019 to 0.0323 in 2023. Although numerically this value appears small, this increase reflects a widening gap in income distribution between regions within the region. Development inequality in the Subosukawonosraten area is largely contributed by differences in per capita income between regencies/cities.

The strength of the Theil Index lies in its ability to identify the contribution of each region to total inequality. The analysis shows that Surakarta City is the largest contributor to regional inequality, with a positive contribution of 0.0726. Conversely, most of the buffer districts, such as Wonogiri, Sragen, Boyolali, and Klaten, have negative or relatively small contributions, indicating that these regions tend to mitigate regional inequality. Development inequality in the Subosukawonosraten area is largely driven by differences in per capita income between districts/cities. The largest contribution to inequality comes from Surakarta City, which has an income level well above the regional average. This finding suggests that the spillover effect of development from the core city to the buffer districts has not been optimal.

Additional analysis excluding Surakarta City from the Williamson Index calculation provides a clearer picture of the structure of regional inequality. The average Williamson Index value for the region without Surakarta City is only 0.2278, indicating that inequality among the buffer districts is relatively low and homogeneous. This shows that the main source of development inequality in Subosukawonosraten does not come from differences

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between buffer districts, but from the gap between Surakarta City as the core area and the supporting areas.

Leading Sector Analysis (Location Quotient)

Location Quotient (LQ) analysis is used to identify economic sectors with comparative advantages in each region. LQ analysis is also used to examine the sectoral specialization patterns of each region. The analysis results indicate that leading sectors in the Subosukawonosraten Region vary across regions.

Wonogiri and Sragen Regencies have a strong agricultural sector. Sukoharjo, Sragen, and Klaten Regencies demonstrate a strong manufacturing sector, indicating relatively more developed manufacturing activity compared to other regions. Meanwhile, Surakarta City and Sukoharjo Regency have wholesale and retail trade as their primary leading sectors.

More specifically, LQ analysis in the Subosukawonosraten Region shows that Wonogiri and Sragen Regencies consistently have agricultural sector LQ values above 1.2 during the 2019–2023 period. This confirms that the agricultural sector remains the primary economic base in both regencies, both in terms of contribution to GRDP and employment. However, this high dependence on the primary sector also indicates limitations in creating added economic value.

Meanwhile, Boyolali and Karanganyar Regencies exhibit relatively more diverse economic structures. While the agricultural sector still plays a significant role, the manufacturing sector is beginning to show significant growth. The manufacturing sector's LQ (Large-Scale Quality Index) in both regions ranges from 1.1 to 1.4, indicating potential for strengthening the secondary sector as a driver of regional economic growth. Sukoharjo and Klaten Regencies have the manufacturing sector as their primary base sector, with LQ values ranging from 1.5 to 2.5. This sector's development is supported by the presence of industrial estates, relatively good accessibility, and geographic proximity to Surakarta City. The food, beverage, textile, and chemical industries are key contributors to the manufacturing sector in both regions, driving its development. This sectoral development reflects a structural transformation from the primary sector to the higher-productivity secondary sector.

Unlike the buffer regencies, Surakarta City has an economic structure dominated by the trade and services sectors. The LQ value for this sector is above 1.3, with a contribution to the city's GRDP reaching over 40 percent. This dominance of the tertiary sector makes Surakarta a center of regional economic activity and explains the city's high per capita GRDP compared to surrounding areas.

This difference in leading sectors indicates economic specialization between regions. However, leading sectors in buffer zones generally have lower added value than leading sectors in Surakarta City. This condition is one of the factors contributing to the difference in per capita income and regional development inequality.

Shift Share Analysis

Shift Share analysis is used to assess the dynamics of economic sector growth by comparing regional sectoral performance with national economic growth. The National Share (Nij) component indicates that most economic sectors in the Subosukawonosraten Region experienced positive growth, in line with the national growth trend during the 2019–2023

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period. The Shift Share method is also used to identify the sources of economic sector growth in each region. The Dij component indicates the total change in sector value, while Mij and Cij explain differences in sectoral performance between regions. All three components, Nij, Mij, and Cij, simultaneously explain the sources of change in Dij.

The analysis shows that the manufacturing and trade sectors in Surakarta City and Sukoharjo Regency have positive Dij and Cij values. This indicates that the growth of these sectors is influenced not only by national economic growth but also by regional competitive advantages, such as production efficiency, labor force, and market access.

Conversely, the agricultural sector in several buffer districts shows relatively small Dij values and low or negative Cij values. This condition indicates that the sector is growing slower than similar sectors at the national level and lacks strong competitiveness, thus limiting its contribution to increasing GRDP per capita. This finding highlights the need for innovation, diversification, and increased added value in the agricultural sector to contribute more significantly to regional economic growth.

The overall results of the Shift Share analysis provide an overview of the sources of economic sector growth in each region. The National Share (Nij) component indicates that, in general, economic sector growth in the Subosukawonosraten area continues to follow the direction of national economic growth. However, differences in performance between sectors and between regions are reflected in the Proportional Shift (Mij) and Competitive Share (Cij) values.

The total sector change (Dij) value indicates that sectors with positive Dij values are generally basic sectors, also having LQ values greater than one and positive Cij. The integration of the LQ and Shift Share analysis results indicates the clustering of the Subosukawonosraten region into several main characteristics: agriculture-based regions, industry-based regions, and service-based regions.

Discussion

Based on the analysis of inequality and leading sectors, it can be concluded that development inequality in the Subosukawonosraten area is not only caused by differences in income levels, but also by differences in economic structure and sectoral competitiveness between regions. Regions with high-value-added leading sectors and strong competitiveness tend to experience faster economic growth and higher per capita income.

This situation suggests that regional development strategies need to be directed at strengthening leading sectors in underdeveloped areas, increasing economic linkages between regions, and optimizing the role of Surakarta City as a growth center capable of driving the economic development of its supporting districts. Thus, the integrated development of leading sectors is expected to be instrumental in reducing regional development inequality.

The integration of the analysis results from the Williamson Index, Theil Index, Location Quotient, and Shift Share indicates that development inequality in the Subosukawonosraten area results from differences in economic structure and sectoral competitiveness between regions. Surakarta City and Sukoharjo Regency serve as the main drivers of regional growth, with their services, trade, and manufacturing sectors having high added value.

On the other hand, agriculturally based districts tend to experience slower economic growth and a smaller contribution to the region's GRDP. This condition causes income disparities between regions to persist and even tend to widen. This finding aligns with the *growth center theory, which states that regions with strong economic agglomerations will grow faster than surrounding areas.*

The overall disparity level for the Subosukawonosraten area is classified as medium to upper with a steady upward trend, reaching peaks of 0.4093 (Williamson) and 0.0324 (Theil) in 2022 due to the impact of the pandemic, which disproportionately hit agricultural districts through supply chain disruptions and reduced purchasing power.

Surakarta dominates as the main contributor to inequality with the highest positive Theil contribution (0.0726), while inter-district disparities are relatively low (average IW 0.2278) thanks to the uniformity of the economic structure based on agriculture and small industries.

Table 1. Measurement of Williamson Index

Regional Disparity in Numbers (Williamson Index)	**Year**					**Mean**
	2019	**2020**	**2021**	**2022**	**2023**	
Total Area	0,3814	0,4029	0,4053	0,4093	0,4090	0,4016
Except Surakarta City	0,2133	0,2302	0,2314	0,2332	0,2311	0,2278

Source: BPS Jateng 2019-2023

Identification of leading sectors through the LQ revealed agriculture (food, plantations) as a strong base in Wonogiri and Sragen (LQ consistently >1.2 throughout the period), manufacturing (textiles, food) in Sukoharjo, Sragen, and Klaten (LQ 1.5-2.5, primarily food and chemical processing), and wholesale and retail trade in Surakarta and Sukoharjo (LQ >1.3, supported by urbanization).

Location Quotient analysis was used to identify the primary and non-primary sectors in each district/city. The results showed variations in leading sectors across regions. Wonogiri and Sragen regencies have agriculture, forestry, and fisheries as their primary base sectors. This reflects the significant role of the primary sector in supporting their regional economies. Boyolali and Karanganyar regencies also remain quite dependent on the agricultural sector, although its contribution is starting to be offset by the manufacturing industry sector.

The manufacturing industry sector is a significant base sector in Sukoharjo, Sragen, and Klaten regencies. The presence of industrial areas and the relatively close proximity to Surakarta City are supporting factors for the development of this sector. Meanwhile, wholesale and retail trade, as well as the services sector, are the main leading sectors in Surakarta City and Sukoharjo Regency.

Shift-Share analysis reinforces these findings: Sukoharjo's manufacturing sector is the most competitive, with the highest positive Cij (hundreds of billions of Rupiah), indicating local advantages. Conversely, Wonogiri's agriculture sector experiences a significantly negative Mij due to a mismatch in its proportional structure with national trends. The combined LQ-Shift-Share classification confirms three basic clusters: agriculture (Wonogiri/Sragen), industry (Sukoharjo/Klaten/Sragen), and trade-services (Surakarta/Sukoharjo). Further discussion highlights that low inequality between districts is due to agrarian homogeneity, but Surakarta's dominance through the service and trade sectors (GRDP contribution >40%) actually weakens the overall regional equality, violating the essence of strategic areas as inclusive motors—in line with Williamson's theoretical critique that without intervention, the center will continue to draw resources from the periphery.

Table 2. Classification of Basic and Non-Basic Sectors of Districts/Cities in the Subosukawonosraten Area

LQ DISTRICT/CITY OF SUBOSUKAWONOSRATEN AREA							
Sectors	***Status Sectors***						
	Surakarta	***Boyolali***	***Sukoharjo***	***Karanganyar***	***Wonogiri***	***Sragen***	***Klaten***
A	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*	*Basic*	*Basic*	*Non-Basic*
B	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Basic*	*Basic*	*Basic*
C	*Non-Basic*	*Basic*	*Basic*	*Basic*	*Non-Basic*	*Basic*	*Basic*
D	*Basic*	*Non-Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*	*Basic*
E	*Basic*	*Non-Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
F	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
G	*Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*	*Basic*	*Non-Basic*
H	*Non-Basic*	*Basic*	*Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*
I	*Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Basic*
J	*Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
K	*Basic*	*Non-Basic*	*Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Basic*
L	*Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
M, N	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
O	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*
P	*Non-Basic*	*Basic*	*Non-Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*
Q	*Basic*	*Non-Basic*	*Non-Basic*	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*
R, S, T, U	*Non-Basic*	*Basic*	*Non-Basic*	*Basic*	*Basic*	*Basic*	*Basic*

Source: BPS Jateng 2023

The analysis shows that most economic sectors in the Subosukawonosraten area experienced positive growth during the 2019–2023 period, as reflected by positive Dij values in most sectors. However, there is variation between regions and sectors.

Surakarta City experienced declines in several sectors, such as mining and quarrying, transportation and warehousing, and other services. Boyolali Regency showed significant declines in most sectors, except for transportation and warehousing and several service sectors. Karanganyar Regency experienced relatively slow growth in the construction, trade, transportation, and corporate services sectors. Positive Cij values in the manufacturing and trade sectors in several regions indicate a regional competitive advantage. Conversely, negative Cij values in the agriculture sector in several regencies indicate weak competitiveness in that sector regionally.

The results of this study also indicate that efforts to reduce regional development disparities need to be directed at strengthening economic linkages between regions. Developing agricultural-based processing industries in agrarian districts can increase local added value and strengthen regional supply chains. Furthermore, improving connectivity infrastructure and human resource quality are key factors in promoting equitable development.

CONCLUSION

Based on the analysis of development inequality and leading economic sectors in the Subosukawonosraten Strategic Area during the 2019–2023 period, this study yields several key conclusions.

First, the level of development inequality between regencies/cities in the Subosukawonosraten Area is in the medium to high category and shows an increasing trend over the study period. The Williamson Index and Theil Entropy Index calculations indicate that regional economic development remains concentrated in certain areas, particularly Surakarta City. This condition reflects that the regional development process has not been evenly distributed despite the area being designated as a strategic area.

Second, Surakarta City plays a dominant role in the regional economy, as reflected in its higher per capita GRDP compared to its surrounding regencies. This dominance is a major contributing factor to regional development inequality. Although theoretically, core cities are expected to provide development spillover effects to surrounding areas, the study results indicate that this effect has not been optimal.

Third, the economic structure between regions in the Subosukawonosraten Area shows significant differences. Wonogiri and Sragen Regencies continue to rely on the agricultural sector as their primary base sector, while Sukoharjo, Sragen, and Klaten Regencies are beginning to show growth in the manufacturing sector. Meanwhile, Surakarta City and Sukoharjo Regency have strong positions in wholesale and retail trade, as well as other service sectors. These differences in economic structure have direct implications for differences in income and welfare levels across regions.

Fourth, the Shift Share analysis shows that the manufacturing and trade sectors in the central region and several buffer zones are relatively competitive, as indicated by positive Competitive Share (Cij) values. Conversely, the agricultural sector in several buffer zones exhibits relatively low competitiveness. This situation suggests that differences in sectoral competitiveness are a significant factor reinforcing regional development inequality.

Overall, development inequality in the Subosukawonosraten Region is not only caused by differences in income levels, but also by differences in economic structure, sectoral competitiveness, and regional capabilities in developing high-value-added leading sectors.

Furthermore, from a spatial perspective, development inequality in this region forms a fairly strong core-periphery relationship. Surakarta City serves as the center of economic activity, trade, and services, while the surrounding regencies act as supporting areas with a relatively high level of economic interdependence. This pattern tends to concentrate capital flows, skilled labor, and high-value-added economic activity in the core region, thus limiting the impact of development on the supporting areas.

The findings of this study also align with several previous studies examining regional development inequality in Indonesia. Several studies indicate that regions dominated by the service and manufacturing sectors generally have higher economic growth rates and per *capita GRDP than regions that rely on the primary sector. These similar findings strengthen the argument that economic structure is a fundamental factor in explaining development inequality between regions.*

The dynamics of development inequality within regencies/cities in the Subosukawonosraten area are also inseparable from the post-COVID-19 pandemic context. In 2020–2021, the national economic contraction had a disparate impact across sectors and regions. The services and trade sectors in Surakarta City recovered relatively quickly, driven by increased economic activity and public mobility, while the agriculture and small-scale industry sectors in several buffer districts experienced slower recovery. This situation contributed to increasing development inequality in the post-pandemic period.

Policy Implementation

Based on the research conclusions, several policies can be recommended to local and provincial governments. First, the government needs to encourage the development of leading sectors in the buffer districts through industrialization policies based on local potential. Developing a processing industry based on agricultural products, livestock, and other local resources can increase economic added value and reduce regional dependence on low-productivity primary sectors.

Second, improving the quality of human resources is a key factor in reducing regional development disparities. Workforce skills improvement programs, vocational education, and industry-based training need to be directed to align with the development of each region's leading sectors.

Third, strengthening connectivity and economic integration between regions in the Subosukawonosraten area needs to be a policy priority. Improvements in transportation infrastructure, logistics, and market access are expected to strengthen economic linkages between Surakarta City and the buffer districts, so that development spillover effects can be felt more evenly.

Fourth, Surakarta City's role as a growth center needs to be optimized not only as a center for consumption and services, but also as a driving force for regional development. Inter-regional cooperation in the form of industrial clusters, integrated economic zones, and strengthening regional supply chains can be important instruments for reducing development gaps and encouraging more inclusive economic growth.

Research Limitation

This study has several limitations, including the use of aggregate macroeconomic data, which is unable to capture microeconomic dynamics and institutional aspects in depth. Furthermore, the study did not explicitly incorporate social variables and infrastructure quality. Therefore, future research is recommended to combine quantitative and qualitative approaches and add social and institutional variables to provide a more comprehensive analysis of regional development inequality.

Recommendations for Further Research

Further research is recommended to incorporate social, institutional, and infrastructure quality variables in greater detail to enable a more comprehensive analysis of regional development inequality. Furthermore, the use of micro-data and a qualitative approach can provide a deeper understanding of regional development dynamics. This study concludes that development inequality in the Subosukawonosraten area remains relatively

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high and tends to increase during the study period. This inequality is primarily due to the dominance of Surakarta City as the region's growth center. Therefore, a more integrated regional development policy is needed, particularly through the development of leading sectors in buffer districts and strengthening economic linkages between regions.

REFERENCES

Afifah, A. N., Ananda, V. D., Nurhakim, R. R., Rahma, F., & Muhammad, I. (2025). Study of Regional Disparities and Economic Potential in Badung Regency, Bali Province. 11, 1656–1663. (Downloaded on June 17, 2025)

Aidar, N., & Syahputra, R. (2015). Analysis of Regional Income Disparities in Aceh Province. Indonesian Journal of Economics and Public Policy, 02(01), 56–68. (Downloaded on July 30, 2025)

Arsyad, L. (2010). Development Economics. Yogyakarta: UPP STIM YKPN.

BPS. (2024). Gross Regional Domestic Product of Regencies/Cities in Central Java by Industry. Semarang: Central Java Statistics Agency.

BPS. (2025, 1 23). Central Java Statistics Agency. Retrieved from [2010 Series] GRDP at Constant Prices by Industry, Klaten Regency (Million Rupiah), 2023: https://jateng.bps.go.id/id/statistics-table/2/MTMwMSMy/-seri-2010--pdrb-atas-dasar-harga-konstan-menurut-lapangan-usaha-kabupaten-klaten.html

BPS. (2025, 1 23). Central Java Statistics Agency. Retrieved from [2010 Series] GRDP at Constant Prices by Regency/City in Central Java Province (Million Rupiah), 2023: https://jateng.bps.go.id/id/statistics-table/2/MTc0MSMy/-seri-2010-pdrb-atas-dasar-harga-konstan-menurut-kabupaten-kota-di-provinsi-jawa-tengah.html

BPS. (2025, 5-30). Population, Population Growth Rate, Percentage Distribution of Population, Population Density, Population Sex Ratio by Subdistrict in Surakarta City, 2019. Retrieved from the Central Statistics Agency of Surakarta City: https://surakartakota.bps.go.id/id/statistics-table/3/V1ZSbFRUY3lTbFpEYTNsVWNGcDZjek53YkhsNFFUMDkjMw==/population--population-growth-rate--percentage-distribution-of-population--population-density--and-population-sex-ratio-by-subdistrict-in-surakarta-muni

Dianti, Y. (2017). Analysis of Development Inequality and Leading Sectors in DKI Jakarta for Economic Rebound Post-COVID-19 Pandemic. English: Angewandte Chemie International Edition, 6(11), 951–952., 3(5), 5–24. http://repo.iain-tulungagung.ac.id/5510/5/BAB 2.pdf (downloaded on June 17, 2025)

Dzikri Ainun Faza, Dwi Susilowati, & Zainal Arifin. (2023). Analysis of Inequality, Economic Growth Patterns, and Leading Sectors in the Kedungsepur Area, Central Java Province. Journal of Economics (JIE), 7(2), 180–194. (downloaded on June 17, 2025)

Fitriyah, L., & Prabowo, P. S. (2021). Analysis of Income Inequality and Development of Leading Sectors in Urban Areas in East Java Province, 2010–2019. Independent: Journal of Economics, 1(2), 206–217. https://doi.org/10.26740/independent.v1n2.p206-217 (downloaded June 17, 2025)

Hadju, I. I., Masinambow, V. A., & Maramis, M. T. (2021). Analysis of Regional Development Inequality in North Sulawesi Province. Scientific Periodical Journal of Efficiency, 21(01), 110–120. (downloaded June 17, 2025)

Hamid, M. (2015). Inter-Regency Income in the Province. (downloaded June 17, 2025)

Hesti Susilowati, S. S. (2022). Analysis of the Incremental Labor Output Ratio (ILOR) of the Development Regions of Central Java Province 2018-2022. (Downloaded June 17, 2025)

Ince Weya. (2022). Unemployment, Poverty, and Income Inequality in North Sumatra Province. Proceedings of the International Conference on Economics and Business, 1(2), 426–435. https://doi.org/10.55606/iceb.v1i2.194 (Downloaded July 24, 2025)

Kuncoro, M. (2014). Regional Autonomy: Towards a New Era of Regional Development. Jakarta: Erlangga University.

Larasati, D., & Setya Wijaya, R. (2022). The Role of the Basic Sector in Reducing Income Disparities in the Subosukawonosraten Area, Central Java Province. E-Journal of Economic and Regional Development Perspectives, 11(2), 113–126. https://doi.org/10.22437/pdpd.v11i2.17660 (downloaded June 17, 2025)

Naufal, D. P. T., & Sumiyarti, S. (2019). Economic Potential of Rapidly Developing and Fast-Growing Regions in West Java Province. KIAT Journal of Economics, 30(1), 64. https://doi.org/10.25299/kiat.2019.vol30(1).3867 (downloaded July 30, 2025)

Raharti, R., Laras, T., & Oktavianti, O. (2021). Model of Economic Development Inequality in Indonesia. Samudra Jurnal Ekonomi dan Bisnis, 12(2), 257–270. https://doi.org/10.33059/jseb.v12i2.2422 (downloaded June 23, 2025)

Sjafrizal. (2012). Regional and Urban Economics. Jakarta: Rajawali Pers

Sukirno, S. (2010). Introductory Micro Theory, Jakarta: PT Raja Grafindo Persada. (downloaded June 17, 2025)

Syafri, R. A. (2022). Inter-Regional Inequality in Indonesia: Developing New Growth Centers, Strengthening Regional Economies (Nusa Tenggara Case Study). State Budget Bulletin Vol. VII (September), 3. www.puskajianggaran.dpr.go.id (downloaded July 24, 2025)

Todaro, Michael P.; Smith, Stephen C.; Harma, Agus; Maulana, Adi; Sallama, Novietha Indra. Economic Development, Eleventh Edition, Volume 1 / Michael P. Todaro, Stephen C. Smith (downloaded June 16, 2025).

Williamson, J. G. (1965). Regional inequality and the process of national development. Economic Development and Cultural Change, 13(4), 3–45.

Yuniar, R. (2019). Analysis of Factors Influencing Regional Inequality in South Sulawesi Province 2010-2016. Journal of Development Economics, Vol. 14, No. 2, July 2022, 1-14 (downloaded on July 30, 2025)