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Economic Growth Analysis and the Role of Leading Sectors in Regencies/Municipalities of West Java (2014–2024)

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ABSTRACT

This study aims to analyze the dynamics of economic growth in West Java Province over the period 2014–2024 using a descriptive quantitative approach based on secondary data. The research focuses on examining trends in Gross Regional Domestic Product (GRDP), identifying dominant sectoral structures, and mapping spatial disparities across districts and cities. The findings reveal that, at the aggregate level, West Java experienced stable and positive economic growth, as reflected by consistent increases in GRDP at both current and constant prices. However, significant disparities persist across regions. Northern and central areas such as Bekasi, Karawang, and Bandung City exhibited higher growth, driven by the dominance of modern industrial and service sectors supported by strong infrastructure. In contrast, southern and eastern regions including Garut, Banjar, and Ciamis showed slower growth due to their reliance on primary sectors, which are more vulnerable to external shocks. These results are supported by spatial and sectoral analysis and align with regional growth theories such as Growth Pole Theory and Williamson's Hypothesis. The study recommends the adoption of more adaptive and equitable development strategies, including infrastructure improvement, local economic diversification, and affirmative policies for underperforming regions, to promote inclusive and sustainable growth across West Java.

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INTRODUCTION

Regional economic growth is one of the fundamental pillars in the development framework of a nation-state. It serves a dual function: first, as a central indicator for evaluating a region's economic performance, and second, as a basis for formulating development strategies that are inclusive and sustainable. Particularly in countries like Indonesia, where geographical, infrastructural, and demographic diversity is immense, regional growth must be assessed not only through macroeconomic aggregates but also through disaggregated, measurable, and time-sensitive indicators. Among these, the Gross Regional Domestic Product (GRDP) stands out as the most widely adopted macroeconomic yardstick to gauge both sectoral productivity and inter-regional equity.

GRDP reflects the total gross value added by all economic activities occurring within a specific regional jurisdiction over a defined period. It encompasses a range of sectors agriculture, manufacturing, construction, trade, services and thus, serves as a comprehensive representation of the economic landscape. Its utility goes beyond economic diagnostics; GRDP is instrumental in identifying regional growth disparities, which in turn enables policymakers to design more balanced and responsive development policies. The United Nations Development Programme (UNDP, 2022) affirms the importance of metrics like per capita GRDP as indicators of both economic performance and social well-being, while the World Bank (2021) correlates high regional GRDP with effective policy implementation, investment productivity, and sectoral interconnectivity.

Within this framework, the province of West Java presents a unique case study. As one of Indonesia's leading provinces in terms of industrial output and contribution to national GDP, it simultaneously reveals significant internal disparities. While areas such as Bekasi, Karawang, and Bandung Raya flourish due to their proximity to economic corridors, advanced infrastructure, and access to industrial capital, other regions like Garut, Tasikmalaya, and Ciamis are still dominated by low-value primary sectors, which limit their economic growth potential. According to Pramudita and Suparmoko (2022), these disparities are largely the result of divergent economic structures and infrastructural inequalities that continue to shape the uneven pace of development within the province.

Moreover, metropolitan centers with strong industrial and service sectors enjoy systemic advantages in terms of economic resilience and recovery, particularly evident during the COVID-19 pandemic. Wardhana et al. (2020) emphasize the role of infrastructure road networks, education facilities, and industrial clusters as key determinants of regional labor productivity and GRDP acceleration. Conversely,

hinterland regions face structural bottlenecks that exacerbate their economic vulnerabilities, leading to widening inequality.

In addition to spatial disparities, recent trends in urbanization and digital transformation have introduced new challenges that require adaptive and dynamic policy frameworks. These trends alter traditional labor markets, consumption behavior, and investment flows. Dosi et al. (2022) highlight the necessity of policy responsiveness to such transformations, noting that technological evolution and digital labor shifts can either exacerbate or mitigate inequality, depending on the readiness of local institutions. This is echoed by Bank Indonesia (2023), which stresses the importance of understanding regional economic structures as a precondition for crafting relevant and effective fiscal and monetary policies.

Another crucial dimension in assessing regional development is per capita GRDP, which acts as a proxy for overall well-being and quality of life. The relationship between GRDP and human development is well documented. For instance, a study by Sulistiani and Najmudin (2023) in Central Java finds that increases in GRDP significantly improve Human Development Index (HDI) scores particularly in areas of education, health, and income. Such findings reinforce the notion that economic growth, when fairly distributed, has a direct and positive impact on the social fabric of communities.

Therefore, understanding GRDP dynamics is not merely an academic exercise, but a necessity for crafting equitable, evidence-based policy. This becomes particularly urgent in regions like West Java, where economic performance is heterogeneous across subnational units. GRDP data can and should serve as the cornerstone of regional planning, enabling governments to prioritize investments, design responsive social programs, and monitor the effectiveness of development policies over time. More importantly, the focus of regional development must shift from merely pursuing high aggregate growth rates to ensuring spatial justice wherein all regions, regardless of geographic or economic starting points, are given the tools and opportunities to grow. Economic growth must be inclusive not only in sectoral composition but also in geographic distribution. Without such equity, sustained long-term development becomes elusive.

1. Problem Statement

Despite West Java's overall economic strength, its regional development has been marked by persistent and significant spatial inequality. The central questions that this study seeks to address are:

1. What are the growth trajectories of GRDP across regencies and cities in West Java from 2014 to 2024?

2. How severe are the disparities in economic growth between regions, and what are their underlying causes?
3. What are the policy implications of these disparities, and how can they inform more balanced regional development strategies?

2. Objectives of the Study

In response to these questions, this study aims to:

1. Map and analyze the patterns of GRDP growth across West Java's administrative regions over a decade-long period (2014–2024).
2. Quantify the degree of economic disparity using standardized statistical indicators and spatial comparison techniques.
3. Provide concrete, data-driven policy recommendations to mitigate inter-regional inequality and support inclusive regional development.

Through this investigation, the study offers a comprehensive framework for understanding not only the quantitative shifts in West Java's economy but also the qualitative implications for regional equity, resilience, and sustainability.

LITERATURE REVIEW

1. Theoretical Foundations of Regional Growth and Spatial Inequality

Understanding regional economic growth and disparities requires a robust theoretical foundation grounded in macroeconomic and development perspectives. Numerous classical and modern theories offer insights into how regions grow, why some lag behind, and how economic transformation impacts spatial equity. In this section, seven key theoretical perspectives are reviewed and contextualized in relation to regional disparities in West Java.

Aggregate Demand – Aggregate Supply (AD–AS) Model: The AD–AS model explains how changes in aggregate demand (consumption, investment, government spending, net exports) interact with aggregate supply (productive capacity) to determine output and price levels. In regional economies, an increase in demand especially driven by infrastructure, investment, and consumption stimulates GRDP growth. Urbanized and industrialized regions in West Java, such as Bandung and Bekasi, exemplify this dynamic with strong domestic demand and supply capabilities that drive continued growth.

Keynesian Growth Theory: The Keynesian framework emphasizes the state's role in stimulating growth through fiscal and monetary policy, especially in regions facing stagnation or structural disadvantages. Public investment in infrastructure,

education, and health can create multiplier effects that boost demand and productivity. This theory is relevant to underdeveloped regencies in West Java, where government spending can address market failures, improve connectivity, and reduce disparities (Kurniawan et al. 2025).

Classical Growth Theory: In contrast, classical theory assumes that free markets lead to efficient resource allocation and equilibrium growth, requiring minimal state intervention. However, this model underestimates the importance of structural imbalances and spatial inequality. In West Java, classical assumptions are limited in explaining why peripheral areas remain underdeveloped despite aggregate growth (Huang, Huang, & Shui, 2021).

Dual-Sector Theory (Todaro): Todaro's theory of economic dualism identifies two coexisting sectors: a traditional, low-productivity sector (mainly agriculture) and a modern, high-productivity sector (industry and services). The gap between these sectors drives inequality, especially when transformation occurs unevenly. In West Java, southern regencies such as Garut, Kuningan, and Ciamis remain largely agrarian, while industrial zones in the north and center thrive (Wirawan et al., 2023).

Growth Pole Theory (Perroux): This theory posits that economic development concentrates in specific "growth poles" from which it radiates through spillover effects. In West Java, growth poles like Bandung, Bekasi, and Karawang are major drivers of provincial GRDP. However, evidence shows limited trickle-down to surrounding areas due to weak connectivity and infrastructure (Zhang et al., 2020).

Williamson's Inverted-U Hypothesis: Williamson (1965) suggests that regional inequality initially rises with economic growth and then declines as development spreads. West Java's pattern aligns with the early phase of this trajectory, where industrial regions grow rapidly while others stagnate (Kurniawan et al., 2025).

Structural Transformation Theory (Kuznets): Kuznets theorizes that economic development leads to a shift from primary to secondary and tertiary sectors. This transition often exacerbates inequality in its early stages but later contributes to inclusive growth. In West Java, structural transformation is evident but uneven.

2. Integrating Theories in the West Java Context

Each theory offers partial explanations for the economic patterns observed in West Java. The province's economic growth is driven by industrial concentration, urban infrastructure, and proximity to economic centers. Simultaneously, peripheral areas face stagnation due to weak sectoral development, poor connectivity, and institutional challenges. The dual-sector and growth pole theories provide spatial explanations, while Keynesian and Kuznetsian models offer policy pathways for inclusive transformation (Skott & Gómez-Ramírez, 2018).

3. Infrastructure, Institutions, and Policy Responsiveness

Beyond classical models, recent literature emphasizes the role of infrastructure and institutions in shaping regional outcomes. Wardhana et al. (2020) found that public infrastructure significantly impacts productivity and GRDP. Metropolitan regions with roads, education, and industrial zones perform better economically. Meanwhile, institutional quality planning capacity, transparency, and efficiency also affects development outcomes.

Hudalah et al. (2021) argue that megaprojects can shift regional geographies, benefiting growth poles but often failing to uplift hinterlands. This suggests that planning must move beyond large projects to ensure inclusive spatial benefits.

4. Empirical Evidence and Regional Development in Indonesia

Empirical studies on Indonesian regions reinforce theoretical perspectives. Pramudita and Suparmoko (2022) found that sectoral disparities and infrastructure gaps strongly explain regional inequality in West Java. Sulistiani and Najmudin (2023) showed that higher GRDP levels improve human development outcomes, validating the structural transformation framework. Dosi et al. (2022) and Mariano & Sandoval (2020) contribute insights into how technological and spatial dynamics affect inequality.

5. Literature Gap and Research Contribution

While existing theories and studies provide valuable insights, few focus on long-term GRDP disparity at the provincial level using integrated theoretical frameworks. This study fills that gap by synthesizing seven major theories with recent empirical findings to analyze 2014–2024 GRDP trends in West Java. This approach enables a deeper understanding of how regional disparities persist and what strategies may resolve them through spatially sensitive, evidence-based policymaking.

6. Literature Synthesis Table

No	Author(s) & Year	Article Title	Objective	Method	Context	Key Findings	Contribution & Gap Identified
1	Pramudita & Suparmoko (2022)	Sectoral Development Inequality in West Java	Analyze sectoral & infrastructure factors	Quantitative, panel data	West Java	Disparities caused by infrastructure and economic structure	Lacks longitudinal focus
2	Wardhana et al. (2020)	Infrastructure and Economic	Link infrastructure to	Panel regression	West Java	Infrastructure supports	Limited institutional analysis

		Growth in West Java	GRDP growth			productivity and growth	
3	Sulistiani & Najmudin (2023)	GRDP and Human Developme nt in Central Java	Correlate GRDP and HDI	OLS Regressio n	Central Java	GRDP growth boosts HDI indicators	Spatial gap not addressed
4	Hudalah et al. (2021)	Megaprojec t Planning and Spatial Governance	Study spatial impacts of megaproje cts	Qualitati ve case study	Java Island	Growth poles reshape geography	No economic data integration
5	Dosi et al. (2022)	Technology Paradigms and Inequality	Tech impact on labor dynamics	Simulatio n	Global	Technology affects inequality depending on policies	Needs regional adaptation
6	Mariano & Sandoval (2020)	Spatial Inequality in the Philippines	Assess spatial inequality	Spatial econome trics	Philippi nes	Persistent inequality despite growth	Comparable context to Indonesia
7	UNDP (2022)	Human Developme nt Report	Assess post- COVID developme nt	Policy review	Global	Highlights inequality and institutional need	Limited regional breakdown
8	World Bank (2021)	Indonesia Economic Prospects	Assess recovery strategies	Macro analysis	Indonesi a	Calls for structural reform	Limited subnational analysis
9	Haryanto & Ramli (2022)	Regional Autonomy and Inequality in Indonesia	Examine impact of autonomy on inequality	Panel data	Indonesi a	Planning quality trumps autonomy alone	Provincial- level specifics missing

METHODS

This study adopts a quantitative descriptive approach to analyze the spatial and sectoral dynamics of economic growth in West Java Province over a ten-year period from 2014 to 2024 (Kurniawan et al., 2025). The use of this approach is based on its effectiveness in capturing patterns, trends, and variations across regions through numerical and comparative data analysis. The research focuses on examining long-term growth trajectories, structural economic shifts, and regional disparities at the sub-national level.

The primary data source consists of secondary data obtained from official publications of Statistics Indonesia (Badan Pusat Statistik/BPS). Specifically, the data

used include Gross Regional Domestic Product (GRDP) figures at both current prices and constant 2010 prices. These datasets are available at both the provincial and district/city levels, enabling an in-depth spatial disaggregation of economic indicators. The selection of the 2014–2024 period is based on the availability and completeness of data, as well as its relevance in reflecting significant economic events, such as the post-decentralization economic transformation, the mid-decade infrastructure expansion, and the economic recovery following the COVID-19 pandemic.

The first stage of analysis involves computing the Compound Annual Growth Rate (CAGR) of GRDP for each district and city (Prasertsoong & Puttanapong, 2024). This is done to identify long-term growth performance and detect spatial patterns of economic acceleration or stagnation across the province. The CAGR serves as a standardized indicator that allows for comparison across different administrative units and time periods.

Following this, a sectoral contribution analysis is performed to evaluate the proportional influence of different economic sectors namely manufacturing, wholesale and retail trade, agriculture, forestry and fisheries, construction, and services on regional GRDP. This analysis helps reveal which sectors have been the main drivers of economic activity in each region and how these roles have evolved over time. It also identifies the presence of economic specialization or diversification across different districts/cities.

To enhance interpretation and communication of the findings, visual analytical tools are employed, including:

1. Line graphs to display temporal trends in GRDP growth at both current and constant prices;
2. Bar charts and stacked graphs to illustrate the changes in sectoral composition over the years;
3. Thematic (choropleth) maps to visualize spatial disparities in economic growth rates, sectoral dominance, and concentration of high-growth clusters.

These visualizations are constructed using data processing and visualization software such as Microsoft Excel, Tableau, or GIS-based tools like QGIS. They enable a clearer representation of regional economic patterns and provide intuitive insights into the structural transformations occurring in West Java's economy.

In addition, comparative analysis is conducted between high-growth and low-growth regions to investigate the structural factors contributing to their respective

economic performances. This includes examining correlations between sectoral structures and growth outcomes, as well as identifying potential geographic and infrastructural influences on economic concentration.

The overarching goal of this methodological framework is not merely to present statistical trends, but to generate a nuanced understanding of regional economic development. By integrating quantitative analysis with spatial interpretation, the study offers a comprehensive view of intra-provincial disparities and the evolving structure of the West Java economy. Ultimately, the insights derived from this approach provide an empirical basis for formulating more targeted and equitable development strategies across regions.

RESULT

1. Economic Growth Trend of West Java Province (2014–2024)

The economic growth of West Java Province over the period 2014 to 2024 exhibits a generally stable and positive trend, although it experienced a significant downturn during the COVID-19 global pandemic. According to data from the Central Bureau of Statistics (BPS), the Gross Regional Domestic Product (GRDP) at current prices increased from IDR 1,385.8 trillion in 2014 to IDR 2,823.3 trillion in 2024. This increase reflects the nominal growth in the total value of goods and services produced within the province, influenced by inflation and price level changes.

Meanwhile, the GRDP at constant 2010 prices representing real economic growth without the influence of inflation grew from IDR 1,149.2 trillion in 2014 to IDR 1,752.1 trillion in 2024. This indicates a substantial expansion in real economic output, demonstrating that West Java has increased its production capacity across various sectors over the last decade.

Nevertheless, economic growth in West Java was not entirely linear. In 2020, the province experienced an economic contraction of -2.52% , primarily due to the impact of the COVID-19 pandemic. Lockdowns, global supply chain disruptions, and reduced domestic and international demand severely affected production and consumption, particularly in key sectors such as manufacturing and trade. This year marked a critical turning point in the region's economic dynamics, revealing its structural vulnerability to global shocks.

Despite this setback, West Java showed a strong recovery capacity in the post-pandemic period. In 2021, the province recorded a positive real growth rate of 3.74% , which increased to 5.45% in 2022. In 2023, growth remained stable at approximately 5% , signaling a sustained recovery phase. This trend illustrates the resilience of West Java's economic system, supported by a diverse economic structure and the significant roles of manufacturing and service sectors in driving post-crisis recovery.

The continued growth also reflects the rebound in domestic demand, rising household consumption, and the resumption of strategic infrastructure projects across the region. Moreover, fiscal and monetary policy interventions such as the National Economic Recovery Program (PEN), support for MSMEs, and tax incentives contributed to the positive economic momentum.

Therefore, the long-term trend of GRDP development highlights a favorable direction for West Java's economic growth, despite the temporary impact of the global crisis. The consistent increase in GRDP at constant prices suggests that production capacity has expanded across sectors and that the province's economic structure is gradually becoming more diversified. Moving forward, key challenges include sustaining growth, addressing interregional disparities, and strengthening resilience against future global economic shocks.

Place the following items after the paragraph above:

Table 1. *GRDP of West Java Province at Current and Constant Prices (2014–2024)*

Year	GRDP at Current Prices (Billion IDR)	Growth Rate (Current Prices) (%)	GRDP at Constant Prices (Billion IDR)	Growth Rate (Constant Prices) (%)
2024	2,823,338.73	7.55	1,752,071.20	4.95
2023	2,625,225.72	8.35	1,669,421.49	5.00
2022	2,422,782.32	9.90	1,589,984.93	5.45
2021	2,204,660.23	5.89	1,507,746.39	3.74
2020	2,082,107.26	-1.93	1,453,380.72	-2.52
2019	2,123,153.71	8.30	1,490,959.69	5.02
2018	1,960,627.65	9.65	1,419,624.14	5.65
2017	1,788,117.36	8.17	1,343,662.14	5.33
2016	1,653,238.42	8.40	1,275,619.24	5.66
2015	1,524,974.83	10.05	1,207,232.34	5.05
2014	1,385,825.00		1,149,216.06	

As shown in Table 1, the Gross Regional Domestic Product (GRDP) of West Java Province has demonstrated a steady upward trend over the last decade. Despite a contraction in 2020 due to the COVID-19 pandemic, both current and constant price values show significant recovery from 2021 onwards. The average annual growth rate after the pandemic indicates a relatively strong economic rebound, suggesting improved production capacity and consumption activity across various sectors.

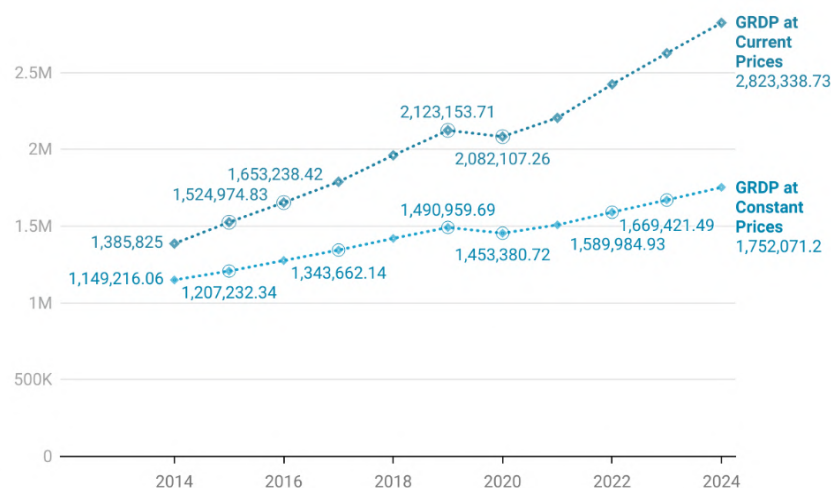


Figure 1. *GRDP Trend of West Java Province (2014–2024) Based on Current and Constant Prices*

The graph above visually illustrates the long-term trajectory of West Java's economic growth, highlighting not only the expansion in nominal GRDP but also the resilience of real economic output post-crisis. The significant drop in 2020 is clearly visible, followed by a gradual recovery phase from 2021 to 2023. The continued upward slope in 2024 further reinforces the province's ability to restore and sustain economic momentum amidst changing macroeconomic conditions.

2. Economic Growth across Regencies and Cities in West Java (2014–2024)

The economic growth across regencies and cities in West Java Province during the 2014–2024 period has demonstrated a diverse and uneven pattern. Based on the Gross Regional Domestic Product (GRDP) at constant 2010 prices for each region, notable disparities in growth can be observed. These disparities are shaped by various factors, including the local economic structure, infrastructure availability, access to national markets, and the presence of strategic development projects.

Regions with economies based on services, trade, and modern industry tend to record higher and more stable growth rates. Bandung City, as the provincial capital and the center of commerce, services, and education, has shown remarkable economic performance. The city recorded growth rates exceeding 7% in the early years of the period. Although it experienced a setback during the 2020 pandemic, Bandung's economy recovered relatively quickly, with growth returning to above the provincial average in the following years.

Depok City has also demonstrated consistent growth, averaging above 6% per year over the decade. This stability is supported by its role as a satellite city of the national capital, with rapid development in the housing, services, and trade sectors. Similarly, Majalengka Regency has experienced a surge in economic growth,

particularly since 2018, following the operation of the West Java International Airport (Kertajati) and the expansion of new industrial zones. These strategic infrastructure developments have stimulated investment and improved regional connectivity, significantly accelerating economic activity.

On the other hand, several regions recorded slower and less consistent growth. Banjar City, for instance, although it showed positive growth in the early part of the decade, experienced a sharp contraction during the pandemic and displayed a relatively slow recovery through 2024. This suggests limited capacity in its key economic sectors and insufficient interregional connectivity. Garut Regency, which still relies heavily on agriculture and small-scale enterprises, consistently grew below the provincial average, highlighting enduring structural challenges in the local economy.

An unusual case was observed in Indramayu Regency, which recorded a peak growth rate of 9.76% in 2020 an anomaly considering the widespread economic downturn caused by the pandemic. This spike is believed to be an outlier, possibly resulting from one-time construction projects or temporary gains in specific sectors, rather than representing sustainable structural transformation. In the following years, Indramayu's growth rates returned to more typical levels.

The disparities in growth rates among West Java's regencies and cities reflect the heterogeneous characteristics of each region. Industrialized and well-connected areas generally experience more rapid and stable economic growth, whereas more agrarian or geographically remote regions tend to face stagnation. This pattern aligns with regional growth theories, which argue that core growth areas tend to expand faster than peripheral regions unless deliberate policy interventions are implemented to ensure more equitable development.

Understanding these dynamics is essential for provincial and local governments in formulating development strategies that are tailored to each region's specific context. Targeted policy measures such as the development of basic infrastructure, incentives for investment in local leading sectors, and the enhancement of interregional connectivity are crucial for encouraging convergence in economic growth and reducing regional disparities.

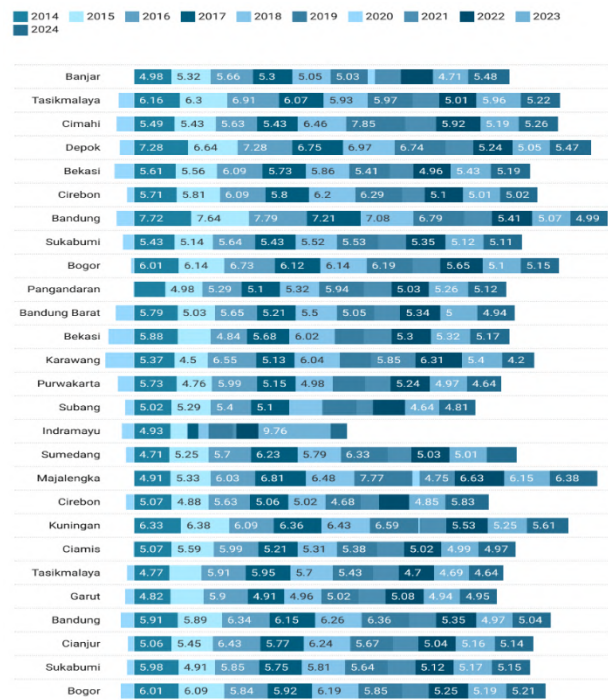


Figure 2. GRDP Growth Trends at Constant Prices by Regency/City in West Java (2014–2024)

Figure 2 particularly highlights how growth was spatially concentrated in urban and industrial centers, while peripheral and agrarian-based regions lagged behind. This uneven pattern emphasizes the need for a more regionally targeted development strategy. Furthermore, the post-pandemic recovery also appears to have varied across regions, indicating differences in resilience and structural readiness.

3. Sectoral Structure of GRDP in West Java Province

The economic structure of a region reflects the main foundations supporting its production and consumption activities. In the case of West Java Province, sectoral contribution data to the Gross Regional Domestic Product (GRDP) from 2014 to 2024 reveals that four main sectors have consistently made significant contributions to the province's economy. These sectors are manufacturing, wholesale and retail trade, construction, and agriculture, forestry, and fisheries.

The manufacturing sector has emerged as the largest contributor to West Java's GRDP, with its share increasing from 36.8% in 2014 to 41.9% in 2024 (Kurniawan et al., 2025). This dominance reflects the strength of a manufacturing-based economy that has long developed in the northern part of the province. Strategic industrial zones such as Bekasi, Karawang, and Purwakarta have become growth centers for this sector, supported by adequate infrastructure, proximity to Jakarta's major market, and integrated logistics networks (Kurnia et al., 2020). The manufacturing sector includes various industries such as automotive, electronics, textiles, and food and

beverages, all of which contribute high value-added output and absorb a large workforce (Ahmad et al., 2019).

Following manufacturing, the wholesale and retail trade sector contributed approximately 14.4% to West Java's GRDP in 2024 (Sunanto, 2014). This sector has grown rapidly, particularly in urban and metropolitan areas such as Bandung, Depok, and Bogor. The presence of modern shopping centers, vibrant traditional markets, and the role of these cities as service and consumption hubs make trade a vital pillar of the regional economy (Dolega & Lord, 2020). Additionally, increased household purchasing power and the expansion of retail networks have fueled sustained growth in this sector.

The construction sector also plays a significant role, contributing 8.4% in 2024 (Alaloul et al., 2021). This sector has experienced substantial growth due to the acceleration of strategic infrastructure development, including toll roads, residential housing, new industrial zones, and megaprojects such as Kertajati International Airport and the Jakarta–Bandung high-speed railway (Williams et al., 2021). The expansion of the construction sector not only supports job creation but also drives economic growth in peripheral areas integrated into new development corridors.

Meanwhile, the agriculture, forestry, and fisheries sector also contributed around 8.4% to West Java's GRDP in 2024 (Kurniawan et al., 2023), and remains a vital sector particularly in the southern and eastern regions of the province. Districts such as Garut, Kuningan, Ciamis, and Tasikmalaya still rely heavily on agriculture in the broad sense (Bisht et al., 2020). Although its contribution is relatively smaller than that of industrial and service sectors, agriculture plays a key role in maintaining food security and providing livelihoods for rural communities. However, this sector continues to face challenges such as limited technological adoption, land fragmentation, and dependence on weather conditions.

The imbalanced sectoral structure also reflects spatial disparities in West Java's economic growth (Yao et al., 2023). Regions dominated by industrial and service sectors tend to achieve higher and more stable growth, while areas dependent on primary sectors are more vulnerable to fluctuations and slower development (Orden-Cruz et al., 2024). Therefore, sectoral analysis is important not only to illustrate the region's economic strengths but also to serve as a basis for designing more balanced and inclusive development strategies.

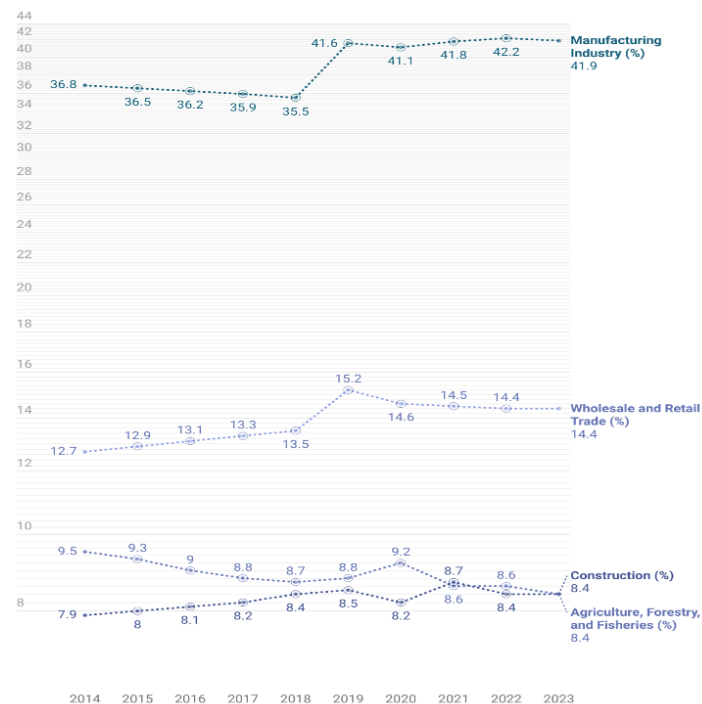


Figure 3. *Sectoral Contribution Comparison (2014 vs 2024)*

This visual comparison provides a clear illustration of how the composition of West Java's economy has shifted over the past decade. The figure highlights the growing dominance of manufacturing, accompanied by stable contributions from the trade, construction, and agricultural sectors. Such visualization helps policymakers and researchers better understand sectoral dynamics and their spatial distribution across the province. This information is crucial for identifying priority sectors and formulating strategic interventions tailored to the economic characteristics of different regions.

4. Spatial Mapping of Economic Growth and Disparities

Spatial mapping of economic growth offers a critical visual representation to better understand how development is distributed across the regions of West Java. Based on the analysis, economic growth appears to be more concentrated in the northern and central parts of the province. Areas such as Bekasi, Karawang, and Bandung City have consistently recorded relatively high growth rates throughout the 2014–2024 period. This trend is closely related to the availability of adequate transportation infrastructure, connectivity to major national growth centers like Jakarta, and the dominance of industrial and modern service sectors that serve as the primary drivers of regional economic activity (Lestari et al., 2024).

In contrast, the southern and eastern regions such as Ciamis Regency, Garut Regency, and Banjar City have shown lower growth rates compared to other areas. Growth in these regions tends to lag due to their continued reliance on primary sectors such as agriculture, forestry, and fisheries, which typically yield lower added

value and are more vulnerable to external shocks like commodity prices and climate variability (Vuković et al., 2022). Additionally, limited access to large markets, low levels of infrastructure investment, and uneven development of industrial zones have emerged as key obstacles to accelerating growth in these regions (Capello et al., 2018).

The map of average annual GRDP growth (at constant prices) over the past decade highlights a spatial gradient of development across districts and cities. Regions with robust logistics access and diversified economic sectors tend to experience faster growth, whereas those with traditional economic bases and geographic isolation grow more slowly (Qiao et al., 2024). This spatial disparity poses a significant challenge in the context of sustainable and inclusive development in West Java, as it can widen the gap in regional welfare unless addressed through affirmative policy interventions (Kurniawan et al., 2025).

Therefore, spatial mapping of economic growth is not only useful as an economic diagnostic tool but also serves as a strategic foundation for designing more contextualized development policies. Local governments are expected to utilize this spatial information to strengthen local potential, improve inter-regional connectivity, and promote growth in key sectors aligned with the geographic and socio-economic characteristics of each region (Wu, 2016). In this way, development strategies can be directed toward reducing growth disparities and fostering more equitable economic distribution across West Java Province.

DISCUSSION

The results of this study indicate that West Java Province has experienced positive and relatively stable economic growth over the past decade. This is reflected in the increasing values of Gross Regional Domestic Product (GRDP), both at current prices and constant prices (Li et al., 2022). This stability implies an expansion of production capacity, rising domestic consumption, and a successful economic recovery following the COVID-19 pandemic (Hakam & Hakam, 2024). However, a more detailed analysis at the regency/city level reveals significant interregional disparities, both in terms of growth rates and in the dominant sectoral structures of each area (Kurniawan et al., 2025).

Regions such as Bandung City and Depok City demonstrate high and relatively stable economic growth compared to other areas. This can be attributed to the dominance of tertiary sectors such as trade, education services, information technology, and healthcare, along with the presence of modern manufacturing industries that are integrated with national and global markets (Wang et al., 2025). Good infrastructure, connectivity to Jakarta, and a high concentration of economic activities further reinforce the role of these regions as emerging growth centers (Du et al., 2022).

In contrast, regions in the southern and eastern parts of West Java such as Garut Regency, Banjar City, and Ciamis Regency show slower economic growth. This is largely due to their reliance on primary sectors such as agriculture, forestry, and fisheries, which are vulnerable to external variables such as commodity price fluctuations, natural disasters, and climate change (Ding & Xu, 2023). These areas also face challenges related to accessibility, limited investment in productive sectors, and inadequate basic infrastructure that could support economic mobility (Cho & Choi, 2020).

Differences in sectoral structure also have direct implications for regional economic resilience and stability. Regions dominated by the manufacturing and wholesale trade sectors tend to have higher value-added, greater expansion capacity, and stronger formal employment creation (Athukorala & Patunru, 2022). As a result, these regions demonstrate stronger economic performance. On the other hand, primary sectors are generally dependent on natural factors, tend to have lower productivity, and are less connected to modern supply chains, making them more vulnerable to economic crises.

These findings align with several classic theories of regional economic development and inequality. One such theory is the Growth Pole Theory developed by François Perroux. This theory argues that economic growth initially concentrates in several centers that possess competitive advantages (growth poles) and subsequently spreads to surrounding regions through sectoral linkages and industrial agglomeration (Yu et al., 2022). In the context of West Java, industrial zones such as Bekasi, Karawang, and Purwakarta can be categorized as growth poles that attract investment and labor, thereby driving regional economic growth.

Williamson's Hypothesis also provides a relevant theoretical framework. According to Williamson, regional inequality tends to increase during the early stages of economic development due to the concentration of investment and economic activity in specific areas. However, as interregional connectivity improves and development diffusion becomes more effective, inequality may gradually decline. This pattern is evident in West Java, where metropolitan regions are growing much faster, while peripheral areas are lagging behind in economic development.

Empirical findings from this study also support prior research by Hudalah, Talitha, & Lestari (2021), which emphasized the role of nationally strategic projects such as international airports, toll roads, and industrial estates as catalysts for regional growth. These projects create multiplier effects by generating new employment opportunities, increasing regional competitiveness, and accelerating interregional economic integration (Hakam et al., 2023). However, the benefits of

such projects have not yet been evenly distributed, as most developments remain concentrated in the northern and western parts of the province.

The observed inequality is not solely driven by fiscal capacity or geographic location, but also by the extent to which regions are integrated into sectoral and spatial linkages that support sustainable growth (Nassani et al., 2025). For example, regions with potential in agro-tourism or horticulture have not fully developed integrated local economic systems in terms of processing, marketing, or connectivity to major urban markets.

Given these dynamics, future development approaches must be more contextual and place-based. Development policies should be tailored to the geographic, social, and economic characteristics of each region. Provincial and local governments must strengthen cross-sectoral and cross-regional coordination and promote investment strategies aimed at achieving equity. Strategic measures may include improving interregional connectivity infrastructure, supporting local MSMEs, enhancing the quality of human resources, and promoting creative industries based on local cultural identity (Endris & Kassegn, 2022).

In conclusion, a comprehensive understanding of spatial and sectoral inequality is crucial not only as an analytical tool for regional economic development, but also as a foundation for designing inclusive, just, and sustainable development strategies for West Java in the future.

CONCLUSION

This study provides an in-depth analysis of the spatial and sectoral dynamics of economic growth in West Java Province during the period 2014 to 2024. The empirical findings demonstrate that, overall, the province has experienced relatively stable and positive economic growth, as reflected in the steady increase of Gross Regional Domestic Product (GRDP) both in current and constant prices. This pattern of growth suggests not only a broadening of the region's production base and increased domestic consumption, but also a noteworthy capacity for economic recovery following the significant disruptions caused by the COVID-19 pandemic. Such resilience indicates the underlying strength of West Java's economic structure and its responsiveness to both policy interventions and external shocks.

However, this overall growth narrative masks persistent and widening spatial inequalities between districts and cities within the province. The northern and central parts of West Java particularly the areas of Bekasi, Karawang, and Bandung City have emerged as dominant growth poles, benefiting from strong infrastructure, integration with national industrial corridors, and a concentration of high-value sectors such as manufacturing, trade, and services. These regions are also supported

by favorable logistics networks, proximity to Jakarta, and access to skilled labor markets, which collectively reinforce their competitive advantage.

In contrast, southern and eastern districts including Garut, Ciamis, Kuningan, and Banjar continue to lag behind, relying heavily on traditional and primary sectors such as agriculture, forestry, and fisheries. These sectors, while vital for food security and rural employment, often face structural limitations including low productivity, vulnerability to climate variability, limited access to credit and modern technology, and weak linkages to national and global value chains. Consequently, these areas are more susceptible to economic volatility and exhibit slower, less inclusive growth trajectories.

The analysis also emphasizes the crucial influence of sectoral composition on regional economic performance. Districts dominated by industrial and commercial activities tend to experience higher growth and stronger resilience, due to their capacity for technological advancement, capital accumulation, and labor absorption. Conversely, areas that remain reliant on primary sectors often struggle with stagnation and are less able to adapt to dynamic market conditions. This disparity underscores the need to consider both spatial and sectoral factors when formulating development policies, as regional imbalances are not merely geographic but deeply embedded in the economic structures and institutional frameworks of localities.

Ultimately, this study reinforces the argument that regional economic development cannot be approached with a one-size-fits-all model. It calls for differentiated, place-based strategies that account for the specific strengths, challenges, and potentials of each district or city. Without such nuanced and context-sensitive approaches, the risk of deepening regional inequalities will remain, undermining broader goals of inclusive and sustainable development in West Java.

RECOMMENDATIONS

1. Expand Infrastructure Development in Lagging Areas

Provincial and district-level governments must intensify efforts to develop critical infrastructure in underperforming regions, particularly in the south and east of the province. This includes transportation infrastructure (roads, bridges, and public transit), logistics facilities, broadband internet access, and utilities such as water and electricity. Improved infrastructure will reduce isolation, improve market connectivity, stimulate local economic activities, and attract both domestic and foreign investments to less developed areas.

2. Promote Economic Diversification Based on Local Potential

Encouraging underdeveloped regions to move beyond traditional sectors is essential. Economic diversification should be guided by local resource endowments and community capabilities. Potential sub-sectors include agri-

business, rural tourism, creative and cultural industries, and information and communication technology (ICT) services. Regional governments can support diversification through tailored business development services, SME financing programs, incubation hubs, and public-private collaboration models aimed at innovation and entrepreneurship.

3. Strengthen Local Human Capital Capacity

Human resources remain one of the most vital assets for regional competitiveness. There is a pressing need to improve the quality of education and vocational training systems, particularly in rural and peripheral areas. This includes aligning curricula with local economic needs, investing in vocational training centers, offering skill certifications, and enhancing teacher competencies. Partnering with industries and universities will help bridge the skills gap, while also fostering a culture of innovation and lifelong learning among the workforce.

4. Mainstream Spatial and Sectoral Planning in Policy Design

Development planning at both the provincial and district levels should be grounded in robust spatial and sectoral analysis. The use of economic mapping, sectoral diagnostics, and geographic information systems (GIS) should be institutionalized in planning processes. This will enable policymakers to identify growth opportunities, allocate resources more efficiently, and implement targeted interventions that respond to regional disparities. Additionally, integrating environmental considerations into spatial planning is essential for long-term sustainability.

5. Foster Interregional Collaboration and Synergy

To avoid fragmented and uneven development, interregional cooperation must be strengthened. Districts and cities should coordinate efforts on joint infrastructure development, cross-border supply chains, and shared investment zones. For example, agricultural products from the south can be processed and exported via industrial facilities in the north, creating complementary regional value chains. The provincial government should act as a facilitator to harmonize development objectives and ensure strategic alignment across jurisdictions.

6. Implement Affirmative Policies for Disadvantaged Regions

Specific policy measures must be directed toward the most lagging areas to break the cycle of underdevelopment. These include fiscal incentives (such as tax breaks and investment subsidies), earmarked budget allocations, and expedited approval for strategic projects. Social protection programs, women's economic empowerment initiatives, and inclusive finance mechanisms should also be prioritized. These affirmative actions will not only boost economic activity but also promote social cohesion and territorial equity.

7. Establish Monitoring and Evaluation Systems for Spatial Disparities

An institutionalized monitoring and evaluation (M&E) framework should be developed to assess progress in reducing spatial inequalities. Key performance indicators might include per capita GRDP, employment rates by sector, infrastructure coverage, education attainment, and multidimensional poverty indices. Regular spatial impact assessments and public reporting mechanisms can ensure transparency and accountability, while also providing feedback loops for policy adjustments and learning.

8. Leverage Digital Transformation to Bridge Gaps

Digital technologies offer an opportunity to overcome physical barriers and democratize access to services and markets. Efforts should be made to promote digital inclusion across all regions, including expanding broadband access, supporting e-commerce platforms for rural producers, and digitizing public services. The digital economy can serve as a catalyst for inclusive growth if appropriately supported through regulations, capacity building, and investment in digital infrastructure.

In conclusion, the policy roadmap for West Java should not only aim at accelerating economic growth but also at correcting imbalances that persist across its regions. A combination of targeted investment, inclusive planning, and strategic coordination among stakeholders will be key to building a more equitable and resilient provincial economy. If these recommendations are effectively implemented, West Java can serve as a model for integrated and inclusive regional development in Indonesia and beyond.

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