

## Analysis of Interregional Development Disparities in Banten Province

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### ARTICLE INFO

### ABSTRACT

**Keywords:**  
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**Background:** Regional development disparities remain a persistent challenge in Indonesia's decentralization era. Banten Province, as one of the country's most industrialized regions, exhibits a dual economic structure where advanced industrial zones coexist with agrarian lagging areas. This study analyzes the level of economic development disparity among districts and cities in Banten Province during the 2015–2024 period.

**Method:** This study employs a descriptive quantitative approach using secondary data from the Central Statistics Agency (BPS) of Banten Province. The data consist of Gross Regional Domestic Product (GRDP) per capita at constant prices and population figures for each of the eight regencies/cities in Banten Province from 2015 to 2024. The Williamson Index was calculated to measure the level of interregional development disparity.

**Results:** The findings reveal that the level of development disparity in Banten Province is relatively high and stable throughout the observation period, with the Williamson Index ranging from 0.627 in 2017 and 2019 to 0.636 in 2024. Cilegon City is the largest contributor to regional disparities (Williamson Index 0.47–0.48), supported by its high GRDP per capita which increased from Rp145,551,706.92 in 2015 to Rp194,522,001.91 in 2024. Pandeglang and Lebak Regencies consistently exhibit the lowest per capita GRDP, indicating persistent economic lag. Tangerang City and South Tangerang City recorded the lowest index values (0.02–0.10).

**Conclusion:** The persistent high disparity reflects a structural concentration of economic activity in northern Banten. From an Islamic economic perspective, this condition contradicts the principles of al-'adalah (distributive justice) and falah (holistic well-being). Policy recommendations include fiscal redistribution, infrastructure investment in lagging regions, and optimization of Islamic social finance instruments (zakat, waqf) to promote inclusive growth.

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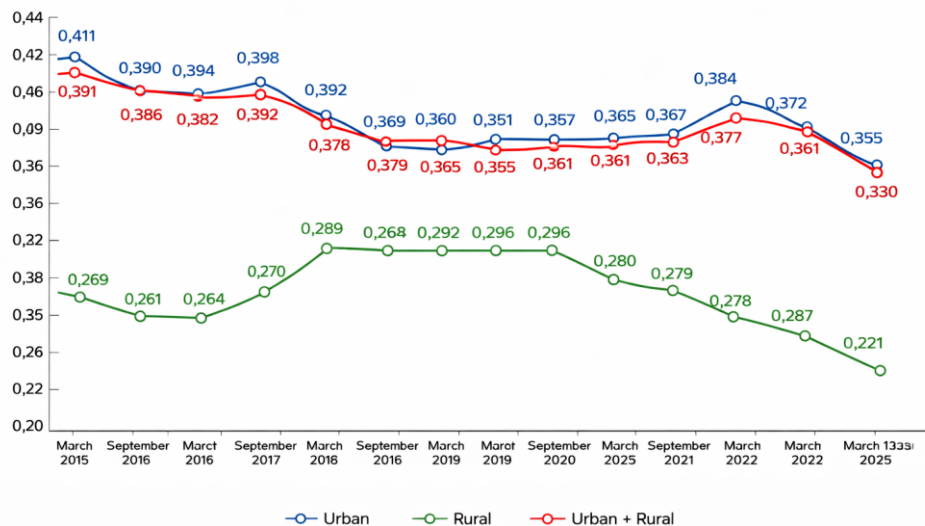
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## INTRODUCTION

The national development plan, which involves the strengthening of local governments as a result of Law of the Republic of Indonesia Number 23 of 2014 on Regional Government, is done in such way that development would be balanced in all parts of the country and also the welfare of the people would be raised continuously. Regional autonomy through local governments opens very large opportunities for them to manage the regional resources and also to make development strategies in line with their local characteristics and potentials. Actually, decentralization can speed up the development of the regions and reduction of disparities among regions. In reality, however, regional development in Indonesia faces a key challenge: regional disparities. Empirical studies suggest that regional disparities are not affected by decentralization policies; rather, regional disparities are a result of the institutional capability of each region (Irawan et al., 2024; Agrawal et al., 2021).

Indonesia’s inequality trends can be seen clearly through the Gini coefficient, which reflects how income is distributed across the population. Over time, the country has experienced a gradual decline in inequality. In 2015, the Gini coefficient stood at 0.410, and by 2024 it had decreased to 0.379. Although this indicates progress, the distribution of income is still far from equal. The lowest 40 percent of the population contributes only 18.65 percent of total expenditure, suggesting that economic resources remain unevenly distributed both among individuals and across regions (Central Bureau of Statistics, 2025). A similar pattern is observed in other contexts. Studies by Halima et al. (2025) and Barika et al. (2024) explain that regional inequality is often driven by disparities in economic growth, unequal investment distribution, and differences in how regions adapt to structural changes.

Regional inequality is particularly evident in Banten Province. Urban areas tend to exhibit higher inequality compared to rural areas, even though overall conditions have slightly improved. Data from the Susenas survey shows that the Gini coefficient declined from 0.401 in March 2015 to 0.330 in March 2025. However, the gap between urban and rural areas persists. Economic growth appears to be more concentrated in cities, leading to uneven regional development. While some areas experience rapid progress, others remain behind. This imbalance is not only reflected in statistical indicators but also in the concentration of economic activities in urban centers, which further widens the disparity between urban and rural living conditions (Wei et al., 2024; Sitepu et al., 2025).

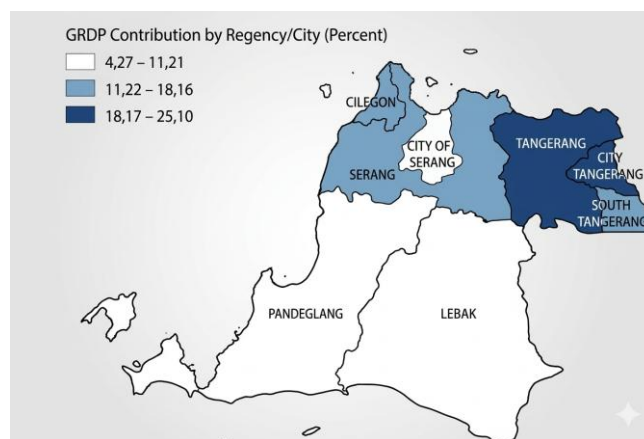


**Figure 1. Development of the Gini Ratio in Banten Province, 2015–2025 (processed from Susenas 2025)**

The figure indicates that the disparity between urban and rural areas has not diminished significantly over time. Although the gap in Gini coefficients between the two has gradually narrowed since 2015, the difference still persists. In urban areas, the Gini coefficient decreased from approximately 0.41 in 2015 to around 0.335 in early 2025, while rural areas showed a lower starting point of about 0.26

and declined further to 0.221. This suggests that, although both areas have experienced improvements, inequality remains more pronounced in urban regions.

The overall reduction points to a gradual improvement in income distribution; however, the pace of change appears relatively slow, particularly in urban areas where economic competition tends to widen disparities. Structural factors likely continue to play a role in maintaining these imbalances, limiting more rapid progress toward equality. In addition, the distribution of Gross Regional Domestic Product (GRDP) in Banten Province highlights a strong concentration of economic activity. Between 2015 and 2024, a large share of economic output was dominated by a few regions. Tangerang City contributed the largest portion at 25.10 percent, followed by Tangerang Regency at 21.25 percent. Other significant contributors include Cilegon City (15.95 percent), South Tangerang (12.48 percent), and Serang Regency (11.73 percent). In contrast, several regions contributed far less, such as Serang City (4.80 percent), Lebak Regency (4.40 percent), and Pandeglang (4.27 percent). This uneven distribution indicates that economic growth is concentrated in specific areas, while other regions lag behind. As a result, less-developed regions may face increasing challenges in catching up, further reinforcing regional inequality and hindering balanced development across the province.



**Figure 2. Average Distribution of ADHB GRDP Percentage by Regency/City in Banten Province 2015–2024 (processed from Banten Province BPS 2024)**

Picture two reveals where Banten's areas ranked from 2015 to 2024. Four clusters form through GRDP rise paired with earnings per person. Leading ahead? Cilegon City lands in Quadrant I - strong expansion meets rich output. Meanwhile, Tangerang City lags behind despite wealth, caught in Quadrant II due to sluggish momentum. Down in Quadrant III sit South Tangerang City, Serang City, along with Tangerang Regency - growth ticking upward, yet earnings stay behind. Meanwhile, Quadrant IV tells a different story altogether Serang Regency, Lebak Regency, Pandeglang Regency caught in slow motion, income barely rising. Plain truth? The gap stands out sharply, exposing how uneven things really are across Banten's landscape.

Consider this from an academic perspective. The idea emerged in 1958 Hirschman was the one who formulated it. Development proceeds unevenly. Some places move faster simply because they got off to a better start. The ripple effect of activity spurs surrounding companies to act, or creates new needs. These hubs may help nearby areas get involved. However, unless regulations push in another direction, the benefits usually stay close to the source. Myrdal previously spoke in a similar vein. He recognized how successes reinforce one another. In places where there is movement, more keeps moving. Meanwhile, quieter regions consistently lose influence. Their resources flow away, drawn to higher-growth areas by quiet channels. In Banten, change occurs slowly in some areas while others advance rapidly. Kuznets noted that the expansion occurring early on creates a gap, which will only ease much later. This old idea remains relevant, showing how uneven growth remains woven into the landscape. Even as new highways and factories are built, there remains a mismatch in the development taking place. A theory once articulated is now clearly visible irregular, shifting, and caught between steps.

Even though some areas in Indonesia grow fast, others stay behind - proof shows why. Research into differences in economies, roads, buildings, plus where money goes reveals one clear pattern: unequal infrastructure spending drives most gaps between regions. Where farming shapes the economy, progress

often slows down. Meanwhile, places with factories and better connections leap ahead without warning. Many studies looked at these imbalances across provinces, Hamdani, yet a full picture covering every district and city in Banten still doesn't exist. Even so, research on gaps before versus after COVID-19 remains sparse because the crisis shook local economies hard. Although some overlook how spreading economic power might help, uneven conditions persist across Banten - shown clearly in recent work by Rahman and team (2024), also backed up by findings from Abbas and Kadhim (2024).

All of the previously mentioned points have justification in Banten Province. Banten is one of the most economically developed provinces. The provincial industrial zones and manufacturing industries enable the province to have one of the highest levels of economic development throughout the entirety of the country and the region. However, areas in the province have very low levels of productivity compared to the aforementioned primary levels, especially areas that are agriculturally dependent and in the other primary levels. The diverse and dual economic structures. Disparities of income inequities are very pronounced in the spheres of employment and levels of development of the regions, and they are very critical. Sufficient and comprehensive research is needed to address the development of effective and inclusive policies.

Despite the growing body of literature on regional inequality in Indonesia, significant research gaps remain regarding Banten Province specifically. Previous Williamson Index studies have focused predominantly on other provinces: Mansyur et al. (2021) examined South Sulawesi, Musyrifah et al. (2024) covered East Kalimantan, Mopangga (2011) analyzed Gorontalo, and Restiasanti (2022) studied Madura Island. While these studies provide valuable comparative benchmarks, none has systematically applied the Williamson Index to all eight regencies and cities of Banten Province across a full decade. This gap is particularly significant given Banten's unique structural characteristics: as one of Indonesia's most industrialized provinces and the primary economic buffer zone for the Greater Jakarta metropolitan area, Banten exhibits a dual economy where world-class heavy industry (Cilegon) and agrarian poverty (Pandeglang, Lebak) coexist within the same administrative boundary. Furthermore, no prior study has examined how the Covid-19 pandemic (2020–2021) specifically affected interregional inequality dynamics within Banten, making the 2015–2024 time series employed in this study a distinct empirical contribution. This study therefore fills a threefold research gap: (1) geographic a province-level Williamson Index study for Banten; (2) temporal a full decade of data including the pandemic disruption period; and (3) thematic the integration of Islamic economic principles (al-'adalah, falah, zakat, and waqf) as normative lenses for interpreting regional inequality findings in a predominantly Muslim province.

One aim is to check how far apart the regions in Banten Province have stayed between 2015 and 2024. Differences in growth become clear when comparing progress over those years. Some areas move ahead while others fall behind, creating uneven patterns. Tracking this helps identify where the imbalance persists across different locations. Progress isn't shared equally, even within one province. The gap changes slowly but remains visible through time. Each region follows its own path, rather than moving together. Disparities grow without steady support reaching every area. Figuring out how each area in Banten Province pulls apart because of unfairness comes down to tracking their differences. Not every region moves at the same pace; some fall behind, while others pull ahead. What sets them apart often shows up in access, resources, or development speed. Differences grow quietly, then become hard to ignore. Measuring that gap means examining closely where the imbalance originates. Figuring out just how far apart things had drifted came first. Then spotting whether gaps stayed frozen or shifted slowly mattered too. Differences either widened quietly or held steady through the years. The next section delves into the research methodology. Following that, there is an examination of the Williamson Index. After examining the results, conclusions begin to take shape. Suggestions appear near the end, shaped by what came before.

## METHOD

This study employs a descriptive quantitative approach with the aim of analyzing the level of development disparities among regions in Banten Province. The study covers eight (8) regencies/cities in Banten Province, namely Cilegon City, Serang City, Serang Regency, Tangerang Regency, Tangerang City, South Tangerang City, Pandeglang Regency, and Lebak Regency.

The data used in this study consists of secondary data obtained through a literature review of official publications from the Central Statistics Agency (BPS) of Banten Province. The data used include

per capita GRDP at constant prices (ADHK) and the population of each regency/city in Banten Province for the period 2015–2024. This data was used as the basis for calculating the Williamson Index. The formulation of the Williamson Index is stated as follows (Sjafrizal 2008):

$$IW = \sqrt{\frac{\sum(y_i - \bar{y})^2(f_i/n)}{\bar{y}}}$$

Keterangan:

IW: Williamson Index

$y_i$ : GRDP per capita in region  $i$

$\bar{y}$  : Average GRDP per capita across all regions

$f_i$ : Population of region  $i$

$n$  : Total population across all regions

Disparity criteria:

If  $IW < 0,35$  this means that economic disparity is low.

If  $IW 0,35 < IW < 0,5$ , it means that economic disparity is moderate.

If  $IW$  nilainya  $> 0,5$ , it means that economic disparity is high.

According to Sjafrizal (2012), one model that is quite representative for measuring the level of development disparity between regions is the Williamson Index proposed by Williamson (1965). Williamson proposed the Vw model (weighted index based on population) and Vuw (unweighted index) to measure the level of per capita income disparity in a region at a given time.

## RESULTS AND DISCUSSION

**Table 1. Gross Regional Domestic Product (GRDP) at Constant Prices (ADHK) by Regency/City in Banten Province, 2015–2024 (pi) (Millions)**

| Regencies/Cities     | 2015          | 2016          | 2017           | 2018           | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           |
|----------------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Pandeglang Regency   | 15,974,129.39 | 16,855,618.52 | 17,866,428.41  | 18,812,931.91  | 19,644,125.08  | 19,511,679.61  | 20,116,898.02  | 20,814,773.64  | 21,340,732.31  | 21,928,594.66  |
| Lebak Regency        | 16,733,237.57 | 17,665,397.46 | 18,683,739.21  | 19,735,870.92  | 20,810,486.83  | 20,622,043.72  | 21,278,484.95  | 22,087,367.08  | 22,706,466.37  | 23,377,240.36  |
| Tangerang Regency    | 77,962,945.83 | 82,183,596.15 | 86,964,026.88  | 92,011,405.21  | 97,129,166.45  | 93,480,392.05  | 97,869,379.61  | 103,219,443.33 | 108,569,829.08 | 113,998,210.70 |
| Serang Regency       | 44,454,582.21 | 46,715,184.52 | 49,154,636.22  | 51,754,319.98  | 54,347,487.78  | 52,866,430.97  | 54,844,646.90  | 57,605,994.12  | 60,369,959.40  | 63,255,334.10  |
| Tangerang City       | 90,807,569.45 | 95,654,618.05 | 101,274,679.40 | 106,283,617.41 | 110,556,398.12 | 102,415,675.10 | 106,413,710.65 | 112,778,097.97 | 119,059,852.18 | 125,060,319.31 |
| Cilegon City         | 59,982,731.73 | 62,981,047.41 | 66,444,529.41  | 70,502,082.41  | 74,228,640.69  | 73,319,124.76  | 77,163,935.90  | 80,646,383.97  | 84,536,646.85  | 88,628,114.51  |
| Serang City          | 17,808,478.25 | 18,935,486.29 | 20,153,022.87  | 21,482,093.45  | 22,813,096.37  | 22,518,660.21  | 23,392,750.37  | 24,495,016.78  | 25,655,254.23  | 26,863,076.79  |
| South Tangerang City | 45,485,613.63 | 48,552,983.88 | 52,098,555.90  | 55,999,106.77  | 60,137,014.46  | 59,531,079.34  | 62,393,119.54  | 66,021,237.49  | 69,561,563.69  | 73,052,841.63  |
| Quantity             | 369,211,303   | 389,543,932   | 412,639,618    | 436,581,428    | 459,666,416    | 444,265,086    | 463,472,926    | 487,668,314    | 511,800,304    | 536,163,732    |

Source: compiled from Banten Province BPS 2024

Based on Table 1, the development of ADHK PDRB of Regencies/Cities in Banten Province in 2015–2024 shows a relatively consistent upward trend during the observation period. The total GRDP of Banten Province increased from IDR 369,211,303 million in 2015 to IDR 459,666,416 million in 2019. However, in 2020, there was a decline in total GRDP to IDR 444,265,086 million, reflecting the impact of the Covid-19 pandemic on economic activity throughout the region. Furthermore, in the 2021–2024 period, the economy will recover again, marked by a sustained increase in total GRDP to reach Rp536,163,732 million in 2024.

In terms of regional distribution, Tangerang City and Tangerang Regency are the areas with the highest GRDP values throughout the research period. In 2024, the GRDP of Tangerang City was recorded at Rp125,060,319.31 million, while that of Tangerang Regency reached Rp113,998,210.70 million. These high values reflect the strong concentration of economic activity, particularly in the manufacturing, trade, transportation, and service sectors, which are supported by adequate infrastructure and geographical proximity to DKI Jakarta. The city of Cilegon also contributed relatively significantly to GRDP compared to other regions, with a GRDP value of IDR 88,628,114.51 million in 2024. This

achievement is mainly supported by the dominance of heavy industry and manufacturing sectors, such as the steel and petrochemical industries, which generate high economic added value.

Conversely, Pandeglang Regency, Lebak Regency, and Serang City are the regions with the lowest GRDP in Banten Province. In 2024, the GRDP of Pandeglang Regency was recorded at Rp21,928,594.66 million, Lebak Regency at Rp23,377,240.36 million, and Serang City at Rp26,863,076.79 million. The low GRDP in these regions indicates that the economic structure is still dominated by the primary sector and traditional services, as well as limited infrastructure and investment. The difference in GRDP between regions shows that economic activity is concentrated in North Banten, particularly Greater Tangerang and Cilegon City, while South Banten is relatively underdeveloped.

**Table 2. Population by Regency/City in Banten Province 2015–2024 (fi) (People)**

| Regencies/Cities     | 2015       | 2016       | 2017       | 2018       | 2019       | 2020       | 2021       | 2022       | 2023       | 2024       |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Pandeglang Regency   | 1,194,911  | 1,200,512  | 1,205,203  | 1,209,011  | 1,211,909  | 1,270,090  | 1,284,640  | 1,298,850  | 1,312,770  | 1,325,950  |
| Lebak Regency        | 1,269,812  | 1,279,412  | 1,288,103  | 1,295,810  | 1,302,608  | 1,383,540  | 1,400,630  | 1,417,350  | 1,433,700  | 1,449,210  |
| Tangerang Regency    | 3,370,594  | 3,477,495  | 3,584,770  | 3,692,693  | 3,800,787  | 3,236,700  | 3,279,710  | 3,321,650  | 3,362,610  | 3,400,490  |
| Serang Regency       | 1,474,301  | 1,484,502  | 1,493,591  | 1,501,501  | 1,508,397  | 1,618,360  | 1,640,110  | 1,661,370  | 1,682,130  | 1,701,800  |
| Tangerang City       | 2,047,105  | 2,093,706  | 2,139,891  | 2,185,304  | 2,229,901  | 1,891,400  | 1,912,030  | 1,931,640  | 1,950,580  | 1,963,970  |
| Cilegon City         | 412,106    | 418,705    | 425,103    | 431,305    | 437,205    | 433,760    | 439,480    | 445,060    | 450,510    | 455,620    |
| Serang City          | 643,205    | 655,004    | 666,600    | 677,804    | 688,603    | 689,410    | 700,950    | 712,410    | 723,790    | 734,870    |
| South Tangerang City | 1,543,209  | 1,593,812  | 1,644,899  | 1,696,308  | 1,747,906  | 1,351,310  | 1,365,390  | 1,378,710  | 1,391,650  | 1,399,500  |
| Quantity             | 11,955,243 | 12,203,148 | 12,448,160 | 12,689,736 | 12,927,316 | 11,874,570 | 12,022,940 | 12,167,040 | 12,307,740 | 12,431,410 |

Source: compiled from Banten Province BPS 2024

Based on Table 2, the population of regencies/cities in Banten Province from 2015 to 2024 generally shows an upward trend in almost all regions. The total population of Banten Province increased from 11,955,243 people in 2015 to 12,431,410 people in 2024. However, in 2020, there was a decline in population to 11,874,570 people due to adjustments in population data and the impact of the Covid-19 pandemic. After that, the population gradually increased again in the 2021–2024 period, indicating demographic recovery and growth in Banten Province.

When viewed by region, Tangerang Regency is the area with the largest population throughout the observation period. The population of Tangerang Regency increased from 3,370,594 in 2015 to 3,400,490 in 2024. Next, the region with the next largest population was Tangerang City, with 2,047,105 people in 2015, decreasing to 1,963,970 people in 2024. South Tangerang City also has a relatively large population, decreasing from 1,543,209 in 2015 to 1,399,500 in 2024, with fluctuations particularly noticeable in 2020.

In contrast, Pandeglang Regency and Lebak Regency are areas with relatively smaller populations compared to other areas in Banten Province. The population of Pandeglang Regency increased from 1,194,911 in 2015 to 1,325,950 in 2024, while Lebak Regency increased from 1,269,812 to 1,449,210 during the same period. This shows that the southern region of Banten Province has a smaller population scale, although it continues to experience growth from year to year.

**Table 3. GRDP Per Capita by Regency/City in Banten Province, 2015–2024 (Yi) (Rupiah/Year) Source: compiled from Banten Province BPS 2024**

| Regencies/Cities     | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Pandeglang Regency   | 13,368,467.94  | 14,040,358.21  | 14,824,414.15  | 15,560,596.15  | 16,209,241.02  | 15,362,438.58  | 15,659,560.67  | 16,025,540.78  | 16,256,261.42  | 16,538,025.31  |
| Lebak Regency        | 13,177,728.33  | 13,807,434.56  | 14,504,848.77  | 15,230,528.33  | 15,976,016.45  | 14,905,274.67  | 15,192,081.38  | 15,583,565.87  | 15,837,669.23  | 16,131,023.36  |
| Tangerang Regency    | 23,130,328.31  | 23,632,987.58  | 24,259,304.47  | 24,917,155.37  | 25,555,014.38  | 28,881,389.08  | 29,840,863.86  | 31,074,750.00  | 32,287,368.76  | 33,524,054.09  |
| Serang Regency       | 30,152,989.25  | 31,468,589.82  | 32,910,372.53  | 34,468,388.62  | 36,029,962.79  | 32,666,669.33  | 33,439,614.96  | 34,673,789.78  | 35,888,997.52  | 37,169,663.94  |
| Tangerang City       | 44,359,018.93  | 45,686,747.83  | 47,327,027.12  | 48,635,621.14  | 49,579,061.19  | 54,148,078.20  | 55,654,833.16  | 58,384,635.84  | 61,038,179.51  | 63,677,306.33  |
| Cilegon City         | 145,551,706.92 | 150,418,665.67 | 156,302,188.90 | 163,462,242.29 | 169,779,944.63 | 169,031,549.15 | 175,580,085.33 | 181,203,397.23 | 187,646,549.13 | 194,522,001.91 |
| Serang City          | 27,687,095.48  | 28,908,962.83  | 30,232,557.56  | 31,693,665.79  | 33,129,533.81  | 32,663,669.24  | 33,372,922.99  | 34,383,314.07  | 35,445,715.24  | 36,554,869.28  |
| South Tangerang City | 29,474,694.37  | 30,463,432.25  | 31,672,799.30  | 33,012,346.09  | 34,405,176.51  | 44,054,346.77  | 45,696,189.03  | 47,886,239.67  | 49,984,955.76  | 52,199,243.75  |
| Quantity             | 326,902,030    | 338,427,179    | 352,033,513    | 366,980,544    | 380,663,951    | 391,713,415    | 404,436,151    | 419,215,233    | 434,385,697    | 450,316,188    |

Based on Table 3 GRDP per capita by Regency/City in Banten Province 2015–2024, there are significant differences in economic welfare between regions. In general, per capita GRDP in all regencies/cities shows an upward trend from year to year. However, in 2020, several regions experienced a slowdown or decline, reflecting the impact of the Covid-19 pandemic on economic activity and

community income. In the 2021–2024 period, per capita GRDP increased again in line with regional economic recovery.

The city of Cilegon consistently records the highest GRDP per capita compared to other regions in Banten Province. In 2015, Cilegon's GRDP per capita was recorded at Rp145,551,706.92 and continued to increase, reaching Rp194,522,001.91 in 2024. The cities of Tangerang and South Tangerang also showed relatively high per capita GRDP values, which tended to increase during the observation period. In 2024, the per capita GRDP of Tangerang City was recorded at Rp63,677,306.33, while South Tangerang City reached Rp52,199,243.75. Tangerang Regency and Serang Regency showed a relatively stable upward trend in per capita GRDP. In 2024, the per capita GRDP of Tangerang Regency was recorded at Rp33,524,054.09, while Serang Regency reached Rp37,169,663.94.

Meanwhile, Pandeglang Regency and Lebak Regency are the regions with the lowest per capita GRDP in Banten Province, although they still show an upward trend. In 2024, the per capita GRDP of Pandeglang Regency was recorded at Rp16,538,025.31, while that of Lebak Regency was Rp16,131,023.36. The low per capita GRDP in these two regions reflects the dominance of the agricultural and traditional service sectors, limited infrastructure, and low levels of industrialization, which have an impact on the economic productivity of the community.

**Table 4. Difference in Per Capita GRDP by Regency/City compared to Per Capita GRDP in Banten Province in 2015–2024 ( $Y_i - \bar{Y}$ )**

| Regencies/Cities     | 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Pandeglang Regency   | -27,494,286 | -28,263,039 | -29,179,775 | -30,311,972 | -31,373,753 | -33,601,738 | -34,894,958 | -36,376,363 | -38,041,951 | -39,751,498 |
| Lebak Regency        | -27,685,025 | -28,495,963 | -29,499,340 | -30,642,040 | -31,606,977 | -34,058,902 | -35,362,438 | -36,818,338 | -38,460,543 | -40,158,500 |
| Tangerang Regency    | -17,732,425 | -18,670,410 | -19,744,885 | -20,955,413 | -22,027,979 | -20,082,788 | -20,713,655 | -21,327,154 | -22,010,843 | -22,765,469 |
| Serang Regency       | -10,709,764 | -10,834,808 | -11,093,817 | -11,404,179 | -11,553,031 | -16,297,508 | -17,114,904 | -17,728,114 | -18,409,215 | -19,119,860 |
| Tangerang City       | 3,496,265   | 3,383,350   | 3,322,838   | 2,763,053   | 1,996,067   | 5,183,901   | 5,100,314   | 5,982,732   | 6,739,967   | 7,387,783   |
| Cilegon City         | 104,688,953 | 108,115,268 | 112,298,000 | 117,589,674 | 122,196,951 | 120,067,372 | 125,025,566 | 128,801,493 | 133,348,337 | 138,232,478 |
| Serang City          | -13,175,658 | -13,394,435 | -13,771,632 | -14,178,902 | -14,453,460 | -16,300,508 | -17,181,596 | -18,018,590 | -18,852,497 | -19,734,654 |
| South Tangerang City | -11,388,059 | -11,839,965 | -12,331,390 | -12,860,222 | -13,177,817 | -4,909,830  | -4,858,330  | -4,515,664  | -4,313,256  | -4,090,280  |

Source: compiled from Banten Province BPS 2024

Table 4 shows that most districts/cities in Banten Province had negative ( $Y_i - \bar{Y}$ ) values throughout the observation period. Pandeglang District and Lebak District were the regions with the largest negative differences and showed a widening trend from year to year. In 2015, the per capita GRDP gap in Pandeglang Regency was recorded at -Rp27,494,286 and increased to -Rp39,751,498 in 2024. Meanwhile, Lebak Regency experienced an increase in the difference from -Rp27,685,025 to -Rp40,158,500 in the same period. This condition shows that the growth of GRDP per capita in both regions was slower than the provincial average, resulting in a greater relative gap.

Tangerang Regency and Serang Regency also consistently recorded negative ( $Y_i - \bar{Y}$ ) values, although with a relatively smaller difference compared to Pandeglang and Lebak. In 2024, Tangerang Regency had a difference of -Rp22,765,469, while Serang Regency had a difference of -Rp19,119,860. This trend of increasing negative values indicates that although both regions experienced economic growth, the growth rate was not able to keep pace with the average for Banten Province. In contrast, Cilegon City consistently recorded positive and very high ( $Y_i - \bar{Y}$ ) values throughout the research period. The difference in Cilegon City's GRDP per capita increased from IDR 104,688,953 in 2015 to IDR 138,232,478 in 2024.

The city of Tangerang also showed a positive ( $Y_i - \bar{Y}$ ) value during the observation period, although it was relatively smaller than that of the city of Cilegon. The difference in per capita GRDP of the city of Tangerang increased from IDR 3,496,265 in 2015 to IDR 7,387,783 in 2024, indicating an improvement in economic performance relative to the average of Banten Province. Meanwhile, Serang City and South Tangerang City still recorded negative ( $Y_i - \bar{Y}$ ) values. However, specifically in South Tangerang City, there has been a decrease in the negative difference since 2020, from -Rp4,909,830 to -Rp4,090,280 in 2024. This condition indicates a process of relative convergence even though the GRDP per capita of these regions has not been able to exceed the average for Banten Province.

**Table 5. Results of the Square of the Reduction in GRDP per Capita by Regency/City with GRDP per Capita in Banten Province, 2015–2024 (Yi–Y)2**

| Regencies/Cities     | 2015                   | 2016                   | 2017                   | 2018                   | 2019                   | 2020                   | 2021                   | 2022                   | 2023                   | 2024                   |
|----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Pandeglang Regency   | 755,935,749,251,027    | 798,799,380,848,314    | 851,459,266,061,622    | 918,815,635,840,193    | 984,312,366,211,158    | 1,129,076,816,925,820  | 1,217,658,111,486,550  | 1,323,239,812,362,450  | 1,447,190,009,066,970  | 1,580,181,608,101,810  |
| Lebak Regency        | 766,460,629,152,172    | 812,019,895,196,771    | 870,211,080,226,323    | 938,934,593,206,379    | 999,001,020,465,341    | 1,160,008,819,419,710  | 1,250,501,988,699,830  | 1,355,590,034,225,190  | 1,479,213,355,958,330  | 1,612,705,133,453,030  |
| Tangerang Regency    | 314,438,909,835,636    | 348,594,200,680,041    | 389,860,469,162,285    | 439,129,317,378,245    | 485,231,879,289,454    | 403,318,365,530,734    | 429,055,506,105,943    | 454,847,504,362,205    | 484,477,223,114,973    | 518,266,597,222,441    |
| Serang Regency       | 114,699,054,329,243    | 117,393,054,144,980    | 123,072,766,082,499    | 130,055,306,715,178    | 133,472,526,644,667    | 265,608,752,395,329    | 292,919,937,524,343    | 314,286,039,367,320    | 338,899,180,378,059    | 365,569,029,325,654    |
| Tangerang City       | 12,223,870,622,643     | 11,447,060,507,168     | 11,041,252,526,159     | 7,634,462,783,977      | 3,984,284,825,617      | 26,872,832,881,827     | 26,013,205,324,367     | 35,793,078,413,975     | 45,427,161,008,207     | 54,579,335,164,956     |
| Cilegon City         | 10,959,776,926,879,300 | 11,688,911,245,631,600 | 12,610,840,759,841,500 | 13,827,331,505,702,400 | 14,932,094,779,550,500 | 14,416,173,884,841,100 | 15,631,392,254,717,900 | 16,589,824,618,178,900 | 17,781,778,597,037,100 | 19,108,218,088,047,800 |
| Serang City          | 173,597,969,257,871    | 179,410,875,917,460    | 189,657,835,291,795    | 201,041,266,969,635    | 208,902,507,050,231    | 265,706,549,271,148    | 295,207,238,824,812    | 324,669,588,407,697    | 355,416,636,979,157    | 389,456,576,947,573    |
| South Tangerang City | 129,687,895,043,376    | 140,184,773,434,928    | 152,063,174,371,141    | 165,385,306,875,900    | 173,654,869,161,967    | 24,106,431,637,895     | 23,603,369,354,727     | 20,391,225,758,584     | 18,604,179,970,554     | 16,730,388,398,074     |

Source: compiled from Banten Province BPS 2024

Based on Table 5, the calculation results show that Cilegon City consistently has the highest (Yi–Y)2 value compared to other districts/cities and tends to increase throughout the research period. In 2015, the square of the difference in per capita GRDP for Cilegon City was recorded at 10,959,776,926,879,300 and continued to increase, reaching 19,108,218,088,047,800 in 2024. This very large value reflects the deviation of Cilegon City's GRDP per capita, which is far above the average for Banten Province.

Pandeglang Regency and Lebak Regency also show relatively large and increasing (Yi–Y)2 values from year to year. Pandeglang Regency recorded an increase in value from 755,935,749,251,027 in 2015 to 1,580,181,608,101,810 in 2024, while Lebak Regency increased from 766,460,629,152,172 to 1,612,705,133,453,030 in the same period. This condition shows that the gap between the GRDP per capita of the two regions and the provincial average is widening. Tangerang Regency and Serang Regency have a smaller (Yi–Y)2 value than Pandeglang and Lebak but still show an upward trend until 2024. In Tangerang Regency, the value increased from 314,438,909,835,636 in 2015 to 518,266,597,222,441 in 2024. Meanwhile, Serang Regency increased from 114,699,054,329,243 to 365,569,029,325,654. This indicates that although both regions experienced economic growth, their per capita GRDP performance was still below the provincial average.

Meanwhile, Tangerang City shows a relatively smaller (Yi–Y)2 value compared to Cilegon City but tends to increase after 2020, from 12,223,870,622,643 in 2015 to 54,579,335,164,956 in 2024. This pattern reflects its position as a region with a GRDP per capita above the provincial average, but not as dominant as Cilegon City. Serang City and South Tangerang City show a relatively smaller (Yi–Y)2 value compared to other regions. Serang City increased from 173,597,969,257,871 in 2015 to 389,456,576,947,573 in 2024. Meanwhile, South Tangerang City has shown a downward trend in the value of (Yi–Y)2 since 2020, from 24,106,431,637,895 to 16,730,388,398,074 in 2024, indicating a process of convergence relative to the average of Banten Province, although it has not yet been able to exceed it.

**Table 6. Results of Population Distribution by Regency/City with Banten Province Population in 2015–2024 (fi/n)**

| Regencies/Cities     | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|----------------------|------|------|------|------|------|------|------|------|------|------|
| Pandeglang Regency   | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Lebak Regency        | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Tangerang Regency    | 0.28 | 0.28 | 0.29 | 0.29 | 0.29 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Serang Regency       | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Tangerang City       | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Cilegon City         | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Serang City          | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| South Tangerang City | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |

Source: compiled from Banten Province BPS 2024

Based on the data in Table 6, Tangerang Regency is the region with the highest (fi/n) value compared to other regencies/cities during the 2015–2024 period. This value ranged from 0.28 to 0.29 in the 2015–2019 period and, despite a decline in 2020 to 0.27, the proportion remained relatively stable until 2024. Tangerang City and South Tangerang City ranked next with relatively large (fi/n) values

compared to other regions. Tangerang City showed a relatively stable value in the 2015–2019 period, namely 0.17, but experienced a decline since 2020, reaching 0.16 in 2024. Meanwhile, South Tangerang City experienced an increase in the proportion of residents until 2019 with a value of 0.13, then showed a downward trend since 2020 to 0.11 in 2024. The decline in the  $(\bar{f}_i/n)$  value in these two regions indicates a decrease in the proportion of residents to the total population of the province, so that their contribution to the Williamson Index value tends to decline.

Serang Regency, Lebak Regency, and Pandeglang Regency have medium  $(\bar{f}_i/n)$  values. Serang Regency showed an increase in the proportion of the population in the 2015–2019 period from 0.12 to 0.14 in 2024. Lebak Regency and Pandeglang Regency also showed a similar pattern, namely a decline in the early period of the study and an increase after 2020. Lebak Regency increased from 0.09 in 2019 to 0.1166 in 2024, while Pandeglang Regency increased from 0.0937 to 0.11 in the same period. These regions have a large proportion of the population, which contributes to the Williamson Index value.

Meanwhile, Cilegon City and Serang City are areas with the lowest  $(\bar{f}_i/n)$  values throughout the observation period. Cilegon City has a relatively low and stable  $(\bar{f}_i/n)$  value, ranging from 0.03 to 0.04, while Serang City ranges from 0.05 to 0.06. Although the small proportion of the population in these two regions causes their demographic contribution to the Williamson Index value to be high, this is especially true for Cilegon City because it has a very high GRDP per capita.

**Table 7. Results of Multiplying  $(Y_i - \bar{Y})^2$  by  $(\bar{f}_i/n)$  for 2015–2024  $\{(Y_i - \bar{Y})^2 \times (\bar{f}_i/n)\}$**

| Regencies/Cities                              | 2015                | 2016                | 2017                | 2018                | 2019                | 2020                | 2021                  | 2022                  | 2023                  | 2024                  |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Pandeglang Regency                            | 75,554,795,671,932  | 78,583,677,121,753  | 82,436,381,106,546  | 87,539,899,230,590  | 92,277,238,014,650  | 120,764,724,483,440 | 130,105,641,077,813   | 141,257,859,782,410   | 154,360,396,644,944   | 168,544,179,884,871   |
| Lebak Regency                                 | 81,408,709,503,017  | 85,134,425,818,116  | 90,047,163,843,714  | 95,879,129,023,863  | 100,663,333,461,201 | 135,155,934,237,615 | 145,679,060,232,575   | 157,913,965,517,420   | 172,310,122,608,820   | 188,003,485,240,327   |
| Tangerang Regency                             | 88,651,138,488,656  | 99,335,008,879,991  | 112,270,416,996,479 | 127,785,933,164,994 | 142,664,031,635,718 | 109,934,132,664,452 | 117,041,059,335,797   | 124,175,166,093,374   | 132,364,508,449,044   | 141,766,732,911,949   |
| Serang Regency                                | 14,144,499,655,645  | 14,280,759,658,437  | 14,766,871,229,638  | 15,388,671,055,737  | 15,573,964,369,188  | 36,199,254,417,339  | 39,958,688,867,536    | 42,914,743,209,826    | 46,318,209,377,948    | 50,044,634,848,854    |
| Tangerang City                                | 2,093,102,304,233   | 1,963,983,331,696   | 1,898,037,694,684   | 1,314,733,581,508   | 687,270,328,731     | 4,280,346,666,253   | 4,136,927,321,965     | 5,682,511,275,345     | 7,199,478,679,220     | 8,622,688,567,421     |
| Cilegon City                                  | 377,791,553,900,539 | 401,060,905,194,476 | 430,658,526,202,339 | 469,970,156,594,825 | 505,007,110,377,233 | 526,600,928,226,343 | 571,381,398,235,658   | 606,841,708,794,143   | 650,880,604,884,013   | 700,329,755,456,245   |
| Serang City                                   | 9,339,758,448,783   | 9,629,879,222,102   | 10,156,192,803,234  | 10,738,330,168,341  | 11,127,668,965,647  | 15,426,306,142,709  | 17,210,891,350,556    | 19,010,199,808,460    | 20,901,238,381,632    | 23,022,324,474,976    |
| South Tangerang City                          | 16,740,398,068,194  | 18,309,060,425,873  | 20,093,617,326,570  | 22,107,979,168,049  | 23,479,923,335,313  | 2,743,279,304,986   | 2,680,526,101,207     | 2,310,634,868,104     | 2,103,595,546,869     | 1,883,469,257,558     |
| $\sum (Y_i - \bar{Y})^2 (\bar{f}_i/n)$        | 665,723,956,040,999 | 708,297,699,652,444 | 762,327,207,203,204 | 830,724,831,987,908 | 891,480,540,487,681 | 951,104,906,143,136 | 1,028,194,192,523,110 | 1,100,106,789,349,080 | 1,186,438,154,572,490 | 1,282,217,270,642,200 |
| $\sqrt{\sum (Y_i - \bar{Y})^2 (\bar{f}_i/n)}$ | 25,801,627          | 26,613,863          | 27,610,274          | 28,822,297          | 29,857,671          | 30,839,989          | 32,065,467            | 33,167,858            | 34,444,712            | 35,808,062            |
| Indeks Williamson                             | 0.631               | 0.629               | 0.627               | 0.628               | 0.627               | 0.630               | 0.634                 | 0.633                 | 0.634                 | 0.636                 |

Source: compiled from Banten Province BPS 2024

Based on Table 7, it can be seen that Cilegon City consistently recorded the highest multiplication value throughout the 2015–2024 period compared to other regencies/cities. In 2015, the value for Cilegon City was recorded at 377,791,553,900,539 and continued to increase, reaching 700,329,755,456,245 in 2024. Tangerang Regency ranked second with a relatively large value. During the 2015–2019 period, the value of Tangerang Regency increased from 88,651,138,488, 656 to 142,664,031,635,718, then decreased in 2020 to 109,934,132,664,452, and gradually increased again to 141,766,732,911,949 in 2024.

Pandeglang Regency and Lebak Regency also show large multiplication values that tend to increase from year to year. Pandeglang Regency experienced an increase from 75,554,795,671,931 in 2015 to 168,544, 179,884,871 in 2024, while Lebak Regency increased from 81,408,709,503,017 to 188,003,485,240,327 during the same period. Meanwhile, Serang Regency and Serang City recorded smaller values compared to the previous regions but showed a fairly consistent upward trend. The value of Serang Regency increased from 14,144,499,655,645 in 2015 to 50,044,634,848,854 in 2024, while Serang City increased from 9,339,758,448,783 to 23,022,324, 474,976.

The cities of Tangerang and South Tangerang are areas with the lowest multiplication values throughout the observation period. The city of Tangerang recorded relatively small and fluctuating values, from 2,093,102,304,233 in 2015 to 8,622,688,567,421 in 2024. South Tangerang City even showed a downward trend since 2020, from 2,743,279,304,986 to 1,883,469,257,558 in 2024. In aggregate, the total product of all districts/cities increased from 665,723,956,040,999 in 2015 to 1,282,217,270,642,200 in 2024.

**Table 8. Williamson Index of Regencies/Cities in Banten Province, 2015–2024**

| Year | Regency    |       |           |        | City      |         |        | Province           |        |
|------|------------|-------|-----------|--------|-----------|---------|--------|--------------------|--------|
|      | Pandeglang | Lebak | Tangerang | Serang | Tangerang | Cilegon | Serang | South<br>Tangerang | Banten |
| 2015 | 0.21       | 0.22  | 0.23      | 0.09   | 0.04      | 0.48    | 0.07   | 0.10               | 0.631  |
| 2016 | 0.21       | 0.22  | 0.24      | 0.09   | 0.03      | 0.47    | 0.07   | 0.10               | 0.629  |
| 2017 | 0.21       | 0.22  | 0.24      | 0.09   | 0.03      | 0.47    | 0.07   | 0.10               | 0.627  |
| 2018 | 0.20       | 0.21  | 0.25      | 0.09   | 0.02      | 0.47    | 0.07   | 0.10               | 0.628  |
| 2019 | 0.20       | 0.21  | 0.25      | 0.08   | 0.02      | 0.47    | 0.07   | 0.10               | 0.627  |
| 2020 | 0.22       | 0.24  | 0.21      | 0.12   | 0.04      | 0.47    | 0.08   | 0.03               | 0.630  |
| 2021 | 0.23       | 0.24  | 0.21      | 0.13   | 0.04      | 0.47    | 0.08   | 0.03               | 0.634  |
| 2022 | 0.23       | 0.24  | 0.21      | 0.13   | 0.05      | 0.47    | 0.08   | 0.03               | 0.633  |
| 2023 | 0.23       | 0.24  | 0.21      | 0.13   | 0.05      | 0.47    | 0.08   | 0.03               | 0.634  |
| 2024 | 0.23       | 0.24  | 0.21      | 0.13   | 0.05      | 0.47    | 0.09   | 0.02               | 0.636  |

Source: compiled from Banten Province BPS 2024

Based on Table 8 on the Williamson Index of districts/cities in Banten Province in 2015–2024, it can be seen that the level of development disparity between regions shows quite clear variations between districts/cities but tends to be stable throughout the observation period. Cilegon City consistently recorded the highest Williamson Index value, ranging from 0.47 to 0.48 during the 2015–2024 period. Tangerang Regency showed a relatively high Williamson Index value in the early period of the study, ranging from 0.23 to 0.25 in 2015–2019, then experienced a decline and remained relatively stable at around 0.21 from 2020 to 2024.

Pandeglang Regency and Lebak Regency showed relatively stable Williamson Index values throughout the observation period, ranging from 0.20 to 0.23 for Pandeglang Regency and 0.21 to 0.24 for Lebak Regency, respectively. Serang Regency and Serang City had relatively lower Williamson Index values compared to other regions. Serang Regency is in the range of 0.09–0.13, while Serang City is in the range of 0.07–0.09. These lower values indicate that the difference in GRDP per capita between these two regions and the provincial average is relatively small, so their contribution to the level of provincial development disparity is also more limited.

Meanwhile, Tangerang City and South Tangerang City recorded the lowest Williamson Index values compared to other regencies/cities. Tangerang City was in the range of 0.02–0.05, while South Tangerang City was in the range of 0.02–0.10, with a downward trend since 2020. This pattern indicates that both regions have a per capita GRDP that is relatively close to the provincial average and a moderate proportion of population, so their contribution to development disparities is relatively small.

Overall, Table 8 shows that the level of development disparity between regions in Banten Province is relatively high and stable throughout the observation period. The Williamson Index value for Banten Province was in the range of 0.627 in 2017 and 2019, increasing to 0.636 in 2024. The dominance of Cilegon City as a center of heavy industry is the main factor contributing to high regional disparities, followed by Tangerang Regency, Lebak Regency, and Pandeglang Regency. Conversely, urban areas supporting DKI Jakarta, such as Tangerang City and South Tangerang City, show a relatively smaller contribution to disparities.

From an Islamic economic perspective, the persistently high Williamson Index values recorded in Banten Province (0.627–0.636) represent not merely a statistical imbalance but a condition that is fundamentally at odds with the Islamic principle of *al-'adalah* (distributive justice). Islam views equitable distribution of wealth and economic opportunity as a religious obligation, not only a policy preference. The Qur'an explicitly warns against the concentration of wealth among a narrow group: "so that it will not be a perpetual distribution among the rich from among you" (QS. Al-Hashr: 7). The dominance of Cilegon City, driven by its heavy industrial concentration in the steel and petrochemical sectors, has generated enormous GRDP per capita values (reaching Rp194,522,001.91 in 2024) without producing proportional spillover effects to neighboring and lagging regions such as Pandeglang and Lebak. This pattern of enclave industrialization contradicts the Islamic concept of *falah* holistic well-being encompassing spiritual, social, and material dimensions which demands that economic progress be inclusive and felt across all segments and regions of the community.

The economic disruption caused by the Covid-19 pandemic (2020–2021), which temporarily depressed Banten's total GRDP to Rp444,265,086 million in 2020, also carries Islamic economic

significance. Islamic finance emphasizes the principle of risk-sharing (ta'awun) rather than risk-transfer, as practiced in conventional interest-based systems. Had solidarity-based financial instruments such as qardhul hasan (benevolent loans) and waqf-linked community funds been more systematically deployed during the pandemic, the economic shock absorbed by the lagging regions of Lebak and Pandeglang could have been mitigated more effectively. Furthermore, the relatively narrow GRDP per capita gap between Tangerang City and South Tangerang City compared to the provincial average (Williamson Index 0.02–0.10) may partly reflect the greater density of formal financial services in these urban areas, whereas Islamic social finance instruments remain underdeveloped in the rural southern districts. This structural asymmetry should be addressed through targeted policies that integrate zakat produktif (productive zakat) and waqf infrastruktur (infrastructure waqf) as complementary redistribution mechanisms alongside conventional fiscal transfers.

## CONCLUSION

The findings of this study highlight persistent and structurally embedded development gaps among regencies and cities in Banten Province over the period 2015–2024. The Williamson Index, ranging from 0.627 to 0.636 at the provincial level, confirms that interregional inequality remains high and stable, with Cilegon City's industrial enclave as the dominant driver of disparity. From an Islamic economic standpoint, this condition is not merely a development challenge but a moral and religious concern. Reducing regional economic disparity is both an economic imperative and a religious obligation rooted in the Islamic values of al-'adalah (justice), ukhuwwah (brotherhood), and falah (holistic well-being). Islam explicitly prohibits the concentration of wealth in the hands of the few (QS. Al-Hashr: 7), and the persistent gap between Cilegon/Tangerang and Pandeglang/Lebak represents exactly such a structural concentration.

Based on these findings, local and provincial governments are recommended to implement three clusters of concrete policies. First, in terms of fiscal redistribution, the allocation formula for Dana Alokasi Umum (DAU) and Dana Alokasi Khusus (DAK) should be revised to increase the proportion directed to Pandeglang and Lebak, which consistently recorded the lowest per capita GRDP values (Rp16,538,025 and Rp16,131,023 respectively in 2024). The Dana Insentif Daerah (DID) mechanism should also be operationalized with explicit convergence targets, rewarding regencies that demonstrably reduce their Williamson Index contribution. Second, regarding infrastructure priorities, investment should be concentrated on inter-district road connectivity in southern Lebak, irrigation systems for agricultural land in Pandeglang, and digital infrastructure (4G/broadband) in rural villages, all of which are preconditions for economic catch-up in these lagging regions. Third, from an Islamic economic perspective, the provincial government and BAZNAS (National Zakat Agency) of Banten should collaborate to optimize the redistribution of zakat produktif from wealthier industrial zones (Cilegon, Tangerang) toward productive economic empowerment programs in Lebak and Pandeglang. Similarly, waqf infrastruktur schemes should be explored as complementary mechanisms to finance public goods such as irrigation, rural markets, and Islamic microfinance institutions (BMT) in underserved areas, thereby promoting inclusive growth aligned with maqashid al-shariah.

This study carries several limitations that future research should address. From a conventional perspective, the use of GRDP per capita as a single welfare indicator does not capture poverty rates, unemployment, or access to services. Future studies should incorporate spatial econometrics and panel data analysis to better understand the dynamic causes and cross-regional spillover effects of inequality in Banten. From an Islamic economic perspective, the study is also limited by the absence of data on halal sector performance, the contribution of informal charity-based transfers, and the scale of Islamic social finance (zakat, infaq, sadaqah, waqf) in each regency/city. Future research is encouraged to integrate these Islamic economic variables including the role of sharia-compliant investment flows and Islamic social funds to provide a more comprehensive picture of how Islamic economic instruments can contribute to closing Banten's persistent regional development gap.

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