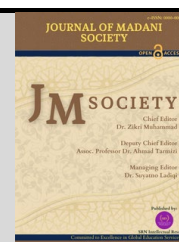




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Original Article

Investigating the Economic Structure and Growth Dynamics in Bandung City: Sectoral Insights for Regional Policy

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Abstract: In recent years, the economic landscape of Indonesian urban centres has undergone a significant transformation, with Bandung City serving as a pertinent case study. Despite its strategic role in regional development and innovation, Bandung has experienced a gradual deceleration in economic growth. This study examines the structural dynamics and sectoral performance of Bandung City's economy from 2020 to 2023, a period marked by post-pandemic recovery and digital transformation. Despite a consistent increase in Gross Regional Domestic Product (GRDP) from IDR 211.25 trillion in 2022 to IDR 221.97 trillion in 2023, the city's economic growth rate decelerated slightly from 5.41% to 5.07%. This slowdown reflects both a return to normalcy after a strong rebound and potential structural challenges within key sectors. Using a sectoral contribution analysis based on GRDP data at constant prices, this study identifies the wholesale and retail trade, manufacturing industry, and information and communication as the top three contributors to the city's economy throughout the period. While these sectors provide a stable economic foundation, the study also highlights significant growth in emerging sectors, including health services, transportation and warehousing, and accommodation and food services. These findings indicate a gradual diversification of Bandung's economic structure, suggesting new areas of opportunity for policy support and investment. The research offers critical insights into regional economic planning, highlighting the need to strike a balance between supporting dominant sectors and fostering emerging industries to ensure sustainable and inclusive urban growth.

Keywords: Regional Economic Growth; Sectoral Contribution; Urban Economic Structure; Bandung City Development.



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1. Introduction

The economic growth trajectory of Bandung City from 2020 to 2023 has been marked by fluctuations and instability. Notably, a significant decline was observed between 2022 and 2023. Figure 1 illustrates the annual economic growth rates over four years from 2020 to 2023. In 2020, the economy experienced a significant contraction, recording a negative growth rate of -2.28%. This decline can be attributed primarily to the global economic downturn caused by the COVID-19 pandemic, which severely disrupted supply chains, reduced consumer spending, and halted many

business operations. However, the economy showed a strong recovery in the following year, with a notable growth rate of 3.76% in 2021. This rebound was likely driven by the gradual reopening of economic sectors, government stimulus measures, and the commencement of mass vaccination campaigns, which restored public confidence. The upward trend continued into 2022, when the economy expanded further to a growth rate of 5.41%. This marked the highest rate during the four years and signified a period of accelerated economic activity, increased investment, and improved global trade conditions. Despite this strong momentum, growth slightly moderated in 2023, with the rate easing to 5.07%. While still robust, the slight decline may reflect the normalization of post-pandemic recovery efforts, the impact of global inflationary pressures, tighter monetary policies, or geopolitical uncertainties affecting trade and investment (Diano et al., 2024). Overall, the data indicate a resilient economic recovery following the pandemic-induced contraction, with growth stabilizing at a healthy pace in the subsequent years.

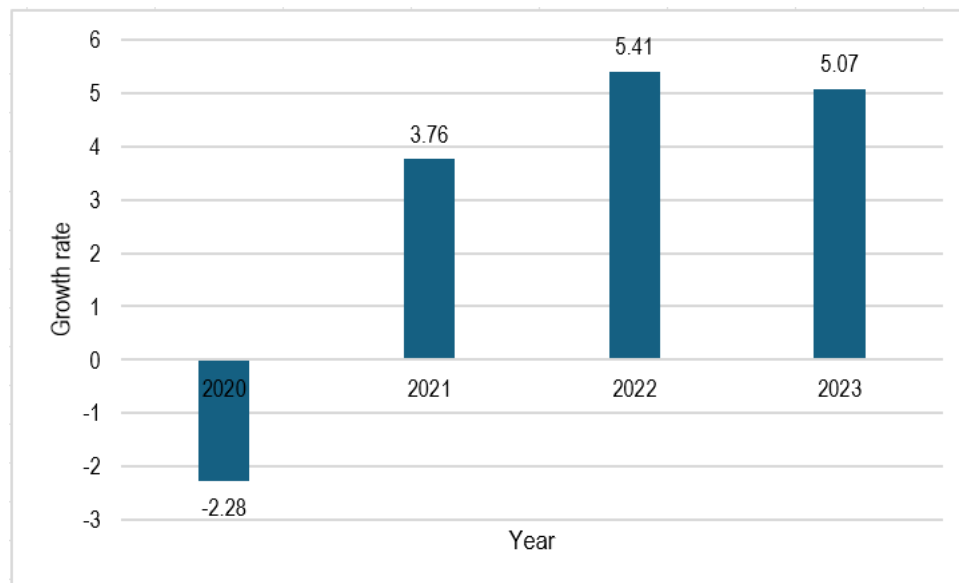


Figure 1. Economic Growth Rate of Bandung City for 2020–2023.

According to the Bandung City Central Bureau of Statistics, the Gross Regional Domestic Product (GRDP) reached IDR 211.25 trillion at constant prices in 2022. This reflected a 5.41% increase in economic growth compared to 2020. In 2023, the GRDP rose to IDR 221.97 trillion; however, the growth rate slowed to 5.07%, indicating a decline of 0.34 percentage points from the previous year. This pattern reflects a dynamic yet unstable economic structure in Bandung City over the past four years. Each business sector contributed differently, revealing both potential and limitations. The observed deceleration in growth in 2023 underscores the importance of evaluating sectoral contributions to better understand the underlying causes and structural imbalances within the urban economy. The central issue addressed in this study is the slowdown in Bandung City's economic growth and its implications for future regional development. Despite positive trends in absolute GRDP, the decreasing rate of growth poses challenges for sustaining economic resilience.

Previous studies have explored GRDP dynamics in major Indonesian cities, yet limited research has specifically examined the sectoral contributions to Bandung's economic structure during the post-pandemic recovery period. This study aims to fill that gap by analysing the economic sectors that have most significantly influenced Bandung City's GRDP from 2020 to 2023. The objective is to identify the dominant sectors, assess their performance and stability, and evaluate their roles in shaping the city's economic trajectory. By doing so, this study contributes to a deeper understanding of the strengths and weaknesses within Bandung's economic structure, providing valuable insights for policymakers, urban economists, and regional planners. To conclude, the key research question guiding this study is how the economic sectors contributed to the structure and growth of Bandung City's economy from 2020 to 2023.

2. Literature Review

One of the most fundamental indicators of economic prosperity and societal wellbeing is income, which serves as a critical measure for assessing the economic status of populations both at national and regional levels (Smith, 2018; Todaro & Smith, 2020). Regional or area income specifically refers to the aggregate level of income attained by communities residing within a defined geographic boundary, and it can be quantitatively evaluated through either the total income generated within that area or the average income per capita, thereby providing nuanced insights into economic disparities and living standards (Jones & Klenow, 2016). Importantly, community income is conceptualised

as the added value produced through economic activities conducted in the region, and while this figure is closely related to the total production output, it does not equate directly to the gross production value due to adjustments for intermediate consumption and other economic factors, which emphasises the importance of value-added metrics in regional economic analysis (Begg et al., 2021).

Consequently, the calculation of regional or area income most commonly operationalised through the Gross Regional Domestic Product (GRDP), provides essential background and perspective on the economic capacity and welfare conditions of regional populations, offering a snapshot of both macroeconomic performance and local economic dynamics (Central Statistics Agency [BPS], 2024). According to the Central Statistics Agency (Badan Pusat Statistik, BPS), Gross Regional Domestic Product (GRDP) is formally defined as the total added value generated by all business units operating within a particular region, encompassing the entirety of economic activities within a district or city regardless of the ownership structure of production inputs or the specific entitlements of production factors; this approach underscores GRDP's role as a comprehensive measure of regional economic output without distinguishing between resident and non-resident ownership (BPS, 2024; World Bank, 2019). This definition aligns with international standards on regional accounts and provides a basis for cross-regional and temporal comparisons of economic performance, enabling policymakers and researchers to evaluate the production capabilities and economic vibrancy of distinct geographic areas (OECD, 2021).

GRDP is typically categorised into two principal types: GRDP at current prices and GRDP at constant prices. The former represents the valuation of regional output using the prices prevailing in the year under review, capturing nominal economic activity but incorporating the distorting effects of inflation or deflation, whereas the latter utilises fixed prices from a base year, such as 2023, to provide a real-term assessment of economic growth by controlling for price level fluctuations over time (Mankiw, 2020). This distinction is crucial for accurately measuring economic progress and for formulating effective regional development policies that address real changes in production and income, rather than nominal changes influenced by price volatility (Samuelson & Nordhaus, 2010). The significance of GRDP data extends beyond mere quantification of economic output; it functions as a vital analytical tool for understanding the overall economic condition and development trajectory of a district or city, offering insights both at a macroeconomic scale and within sector-specific contexts (Fischer & Choe, 2022). By enabling comparative analysis across regions, GRDP facilitates the assessment of relative development levels, highlighting disparities and growth potentials that can guide targeted interventions and resource allocations (United Nations Development Programme [UNDP], 2019).

Moreover, GRDP serves as an important indicator in evaluating key economic dimensions such as the rate of economic growth (Kogoya et al., 2020), the structural composition of the regional economy, the welfare of local populations, and the prevalence of inflationary or deflationary trends, thereby informing both academic inquiry and practical governance (Todaro & Smith, 2020). A detailed examination of GRDP figures by economic sector reveals the underlying economic structure of a region, allowing for the identification of dominant sectors whose relative contributions determine whether the region's economic profile is primarily agricultural, industrial, service-oriented, or characterized by other distinctive activities (Porter, 1990). This sectoral composition analysis offers valuable insights into the region's development path and competitive advantages, informing strategic planning and promoting sustainable economic growth through the promotion of sectors with high value-added potential and employment generation capacity (Porter, 1990; Krugman, 1994).

3. Materials and Methods

The method used in this study is sectoral contribution analysis, which relies on secondary data derived from Bandung City's Gross Regional Domestic Product (GRDP) for the years 2020-2023. The purpose of this analysis is to identify the city's economic structure by examining the relative contribution of each economic sector to the total GRDP in each year. The economic structure is determined based on the sectors that contribute the highest proportion. The analysis begins with the calculation of the contribution percentage of each economic sector using the formula proposed by BPS, where the GRDP value of a specific sector is divided by the total GRDP value and then multiplied by 100 percent. After obtaining the contribution values, the proportion of each sector is assessed annually. Subsequently, the three sectors with the highest contribution in each year are identified and ranked. Based on these rankings, the dominant sectors that shape the economic structure of Bandung City for the period 2020-2023 are identified.

4. Results

Table 1 presents the Gross Regional Domestic Product (GRDP) data for Bandung City from 2020 to 2023, measured at constant 2010 market prices, providing a comprehensive overview of the city's economic structure and growth trends across various industry sectors. The total GRDP steadily increased from Rp 193.14 trillion in 2020 to Rp 221.97 trillion in 2023, reflecting consistent economic recovery and expansion following the economic contraction caused by the COVID-19 pandemic.

Table 1. Gross Regional Domestic Product at 2010 Constant Market Prices by Industry in Bandung Municipality for 2020 – 2023

No	Industries / Sectors	2020	2021	2022	2023
1	Agriculture, Forestry, and Fishing	173,71	171,98	171,48	168,33
2	Mining and Quarrying	-	-	-	-
3	Manufacturing	38.204,35	39.247,99	40.283,92	41.196,68
4	Electricity and Gas	159,09	168,74	179,24	184,18
5	Water Supply; Sewerage, Waste Management, and Remediation Activities	293,36	315,84	312,90	306,93
6	Construction	15.959,04	16.681,87	16.619,30	17.247,51
7	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	50.409,94	51.772,63	54.261,26	56.411,59
8	Transportation and Storage	10.987,44	10.756,43	12.139,21	13.205,91
9	Accommodation and Food Service Activities	8.084,90	8.179,17	9.319,18	9.857,75
10	Information and Communication	35.402,32	38.875,29	42.350,57	46.170,59
11	Financial and Insurance Activities	10.551,96	10.733,59	10.607,74	10.782,02
12	Real Estate Activities	2.513,83	2.758,09	2.919,72	3.048,40
13	Business Activities	1.442,42	1.516,41	1.673,78	1.791,44
14	Public Administration and Defence; Compulsory Social Security	4.267,39	4.252,02	4.175,10	4.208,92
15	Education	6.399,91	6.468,39	6.787,30	7.132,10
16	Human Health and Social Work Activities	1.957,09	2.131,10	2.362,47	2.582,51
17	Other Services Activities	6.338,20	6.384,47	7.087,49	7.674,27
	Total	193.144,95	200.414,03	211.250,67	221.969,13

Among the sectors, Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles was the largest contributor to Bandung's economy, with its GRDP rising from Rp 50.41 trillion in 2020 to Rp 56.41 trillion in 2023. The Manufacturing sector also showed stable growth, increasing from Rp 38.20 trillion to Rp 41.20 trillion over the same period. A notable trend was observed in the Information and Communication sector, which recorded the most dynamic growth, surging from Rp 35.40 trillion in 2020 to Rp 46.17 trillion in 2023. This significant rise reflects the accelerating digital transformation and increasing reliance on technology-based services in the city. Other sectors that demonstrated positive trends included Accommodation and Food Service Activities, which grew from Rp 8.08 trillion to Rp 9.86 trillion, and Transportation and Storage, which rose from Rp 10.99 trillion to Rp 13.21 trillion—both indicating recovery in tourism, hospitality, and mobility services. The Construction sector also expanded steadily from Rp 15.96 trillion to Rp 17.25 trillion, suggesting ongoing infrastructure and urban development.

Conversely, sectors such as Agriculture, Forestry, and Fishing experienced a gradual decline, from Rp 173.71 billion in 2020 to Rp 168.33 billion in 2023, highlighting a diminishing role of primary industries in Bandung's increasingly urban economy. No data was recorded for Mining and Quarrying, indicating it may be negligible or absent in the city's economic activities. Social sectors such as Education, Human Health, and Social Work Activities showed steady growth, which may be attributed to increased investments and demand for services in the post-pandemic period. Financial and Insurance Activities, Real Estate Activities, and Public Administration exhibited relatively stable but modest increases. Meanwhile, Other Services Activities, including community and household services, grew significantly from Rp 6.34 trillion to Rp 7.67 trillion, reflecting a broader expansion in the service sector. Overall, the GRDP data illustrates that Bandung's economic growth between 2020 and 2023 was primarily driven by trade, manufacturing, and information-communication sectors, with a notable recovery in hospitality and services, while traditional sectors like agriculture played a minor role.

Table 2. Growth Rate of Gross Regional Domestic Product at 2010 Constant Market Prices by Industry in Bandung Municipality for 2020 – 2023

No	Industries / Sectors	2020	2021	2022	2023
1	Agriculture, Forestry, and Fishing	-6,70	0,99	-0,29	-1,84
2	Mining and Quarrying	-	-	-	-
3	Manufacturing	0,21	2,73	2,64	2,27
4	Electricity and Gas	-8,21	6,07	6,22	2,76
5	Water Supply; Sewerage, Waste Management, and Remediation Activities	7,71	7,66	-1,34	-1,91
6	Construction	-8,68	4,53	-0,38	3,78
7	Wholesale and Retail Trade; Repair of Motor Vehicles and Motor-cycles	-9,93	2,70	4,81	3,96
8	Transportation and Storage	-23,61	-2,10	12,86	8,79
9	Accommodation and Food Service Activities	-18,25	1,17	13,94	5,78
10	Information and Communication	32,26	9,81	8,94	9,02
11	Financial and Insurance Activities	2,27	1,72	-1,17	1,64
12	Real Estate Activities	1,22	9,72	5,86	4,41
13	Business Activities	-10,72	5,13	10,38	7,03
14	Public Administration and Defence; Compulsory Social Security	-3,04	-0,36	-1,81	0,81
15	Education	4,46	1,07	4,93	5,08
16	Human Health and Social Work Activities	-5,77	8,89	10,86	9,31
17	Other Services Activities	-14,18	0,73	11,01	8,28
	Average Growth	-2,28	3,76	5,41	5,07

Table 2 presents the annual growth rates of Bandung City's Gross Regional Domestic Product (GRDP) by industry, based on 2010 constant prices, from 2020 to 2023. This data highlights the varying impacts of the COVID-19 pandemic and the subsequent economic recovery across different sectors. The average GRDP growth rate experienced a significant contraction of -2.28% in 2020, followed by a rebound of 3.76% in 2021, and stronger growth of 5.41% in 2022, before slightly easing to 5.07% in 2023. In 2020, nearly all sectors experienced negative growth due to the pandemic. The Transportation and Storage sector saw the steepest decline at -23.61%, followed by Accommodation and Food Service Activities at -18.25%, and Other Services Activities at -14.18%. These declines reflect the impact of mobility restrictions, reduced tourism, and declining consumer demand. The Wholesale and Retail Trade sector also contracted by -9.93%, and Construction fell by -8.68%. Interestingly, while most sectors declined, the Information and Communication sector grew significantly by 32.26%, indicating an increased reliance on digital services during lockdowns. Water Supply and Waste Management also recorded growth at 7.71%, likely due to heightened hygiene and sanitation efforts.

By 2021, the city's economy began to recover. Most sectors returned to growth, though at varying speeds. Information and Communication continued its strong performance with a 9.81% growth rate. Real Estate Activities grew by 9.72%, reflecting increased property activity, while Human Health and Social Work Activities posted 8.89% growth, likely due to continued pandemic response efforts. However, some sectors, such as Transportation and Storage and Public Administration, remained sluggish or contracted slightly. In 2022, the momentum of recovery continued to strengthen. High growth was recorded in Accommodation and Food Service Activities (13.94%), Transportation and Storage (12.86%), and Other Services Activities (11.01%), indicating a strong rebound in services, mobility, and consumer activity. Business Activities also showed double-digit growth at 10.38%. Meanwhile, Information and Communication maintained robust performance with 8.94% growth.

By 2023, although overall growth slightly slowed, it remained strong and broad-based. Human Health and Social Work Activities grew by 9.31%, supported by ongoing investments in healthcare. Information and Communication again recorded high growth at 9.02%, while Other Services Activities, Transportation and Storage, and Business Activities all showed solid gains. Most sectors stabilized, although a few, such as Water Supply and Agriculture, continued to decline slightly. In summary, Bandung's economic growth from 2020 to 2023 demonstrates a significant recovery from the pandemic-induced downturn. The digital, trade, health, and services sectors were key drivers of this recovery, while

some traditional or utility-related sectors experienced more modest or negative growth. The data demonstrates how different industries adapted and responded to both the challenges of the pandemic and the opportunities in its aftermath.

Table 3. Contribution of Economic Sectors by Industry in Bandung Municipality 2020 – 2023

No	Industries / Sectors	2020	2021	2022	2023
1	Agriculture, Forestry, and Fishing	0,09	0,09	0,08	0,08
2	Mining and Quarrying	-	-	-	-
3	Manufacturing	19,78	19,58	19,07	18,56
4	Electricity and Gas	0,08	0,08	0,08	0,08
5	Water Supply; Sewerage, Waste Management, and Remediation Activities	0,15	0,16	0,15	0,14
6	Construction	8,26	8,32	7,87	7,77
7	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	26,10	25,83	25,69	25,41
8	Transportation and Storage	5,69	5,37	5,75	5,95
9	Accommodation and Food Service Activities	4,19	4,08	4,41	4,44
10	Information and Communication	18,33	19,40	20,05	20,80
11	Financial and Insurance Activities	5,46	5,36	5,02	4,86
12	Real Estate Activities	1,30	1,38	1,38	1,37
13	Business Activities	0,75	0,76	0,79	0,81
14	Public Administration and Defence; Compulsory Social Security	2,21	2,12	1,98	1,90
15	Education	3,31	3,23	3,21	3,21
16	Human Health and Social Work Activities	1,01	1,06	1,12	1,16
17	Other Services Activities	3,28	3,19	3,36	3,46
	Average Contribution	5,88	5,88	5,88	5,88

Table 3 presents the percentage contribution of each economic sector to Bandung City's Gross Regional Domestic Product (GRDP) from 2020 to 2023, based on 2010 constant market prices. This data provides insight into the structural composition of the city's economy, revealing which sectors consistently played dominant roles and how their relative significance has shifted over time. Throughout the four-year period, Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles remained the largest contributor, although its share slightly decreased from 26.10% in 2020 to 25.41% in 2023. This consistent dominance reflects Bandung's strong positioning as a commercial and consumer-driven urban economy. Manufacturing was the second-largest contributor, though its share gradually declined from 19.78% in 2020 to 18.56% in 2023, indicating a relative deceleration in its growth compared to faster-rising sectors. In contrast, Information and Communication experienced notable growth in contribution, increasing from 18.33% in 2020 to 20.80% in 2023. This upward trend illustrates the rapid expansion and growing importance of the digital economy in Bandung, likely driven by increased demand for internet-based services, digital platforms, and remote work infrastructure following the pandemic. Several service-based sectors also showed modest increases. Transportation and Storage grew from 5.69% to 5.95%, and Accommodation and Food Service Activities increased slightly from 4.19% to 4.44%, reflecting post-pandemic recovery in mobility, logistics, tourism, and hospitality. Other Service Activities also rose from 3.28% to 3.46%, highlighting the expansion of miscellaneous services, including entertainment, recreation, and household services.

Conversely, some sectors saw a gradual decline in their relative contributions. Construction decreased from 8.26% in 2020 to 7.77% in 2023, despite absolute growth in GRDP values, suggesting it grew more slowly than other sectors. Financial and Insurance Activities and Public Administration and Defence also experienced minor reductions in their share, from 5.46% to 4.86%, and 2.21% to 1.90%, respectively. The Agriculture, Forestry, and Fishing sector had a minimal contribution throughout the period, remaining steady at 0.08–0.09%, which reflects the limited role of primary industries in Bandung's urban economy. Similarly, sectors such as Electricity and Gas, Water Supply, and Business Activities maintained very small shares, generally under 1%, showing relatively minor influence on the city's total economic output. In summary, Bandung's economic structure between 2020 and 2023 was predominantly driven by trade, manufacturing, and a rapidly expanding information and communication sector. The gradual decline in traditional sectors and the rise in technology and service-oriented industries highlight the city's ongoing shift toward a more modern, digitally integrated urban economy.

5. Discussion

The results of the GRDP analysis from 2020 to 2023 reflect the evolving economic structure of Bandung City, which demonstrates a balance between stability in key sectors and dynamic growth across various industries. The consistent contributions from the main economic sectors indicate a relatively stable structural foundation, while the variations in growth rates among smaller sectors highlight the city's adaptive and transitional economic potential (Azaki, 2024). The contribution values serve as a portrayal of Bandung City's economic pattern during this four-year period (BPS Kota Bandung, 2024).

5.1 Economic Sectors with the Largest Contribution

Between 2020 and 2023, three business sectors consistently provided the largest share of Bandung City's GRDP. First, the Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles sector remained the dominant contributor throughout the period. In 2023, this sector accounted for 25.33% of the total GRDP, reflecting the city's function as a major retail and trade center in West Java. This stability is consistent with the urban economic structure of many Indonesian cities, where trade activities are heavily concentrated (Firman, 2020). Second, the Manufacturing Industry continued to serve as one of the pillars of the local economy, contributing 18.73% in 2023. Although this sector experienced a slight slowdown compared to the previous year, it remains vital for employment and industrial productivity. The slowdown could be attributed to factors such as supply chain disruptions, market reorientation, or increased competition from other regions (World Bank, 2022). Third, the Information and Communication sector demonstrated notable and steady growth, reaching 14.69% of GRDP in 2023. This growth reflects the increasing integration of digital technologies, e-commerce expansion, and greater reliance on information-based services, particularly after the acceleration of digital transformation during the COVID-19 pandemic (UNCTAD, 2021; Nugroho et al., 2022).

5.2 Development of Business Field Growth

Although the overall economic structure of Bandung City showed relative stability, the growth dynamics of individual sectors presented several noteworthy developments. In 2023, a slowdown was observed in major sectors, including Wholesale and Retail Trade and Manufacturing. These sectors, while structurally dominant, grew at a slower pace than in 2022, indicating possible post-pandemic normalization, reduced consumer spending, or supply-side constraints (OECD, 2023). In contrast, several smaller sectors demonstrated accelerated growth. The Health Services and Social Activities sector recorded the highest growth rate at 9.31%, likely driven by increased public and private investment in healthcare following the pandemic and growing awareness of health-related services (WHO, 2022). The Transportation and Warehousing sector also performed strongly, growing by 8.79%, as mobility and logistics operations recovered in tandem with rising economic activity. The Information and Communication sector continued to post high growth at 9.02%, emphasizing the enduring importance of digital platforms in the urban economy. Additionally, the Accommodation and Food and Beverage Provision sector showed considerable improvement, supported by the recovery of tourism-related activities. The rebound of domestic and regional tourism contributed to increased demand for hospitality services, in line with national efforts to revitalize the tourism economy (Ministry of Tourism and Creative Economy, 2023; Suwantoro, 2019).

6. Conclusions

The analysis of Bandung City's GRDP from 2020 to 2023 reveals a relatively stable economic structure, consistently dominated by three key sectors: Wholesale and Retail Trade, Manufacturing, and Information and Communication. These sectors form the backbone of the city's economy, significantly contributing to its overall economic performance. While the contribution levels of the dominant sectors have remained stable, the growth dynamics within other sectors suggest a shifting landscape. Notably, sectors such as Health Services, Transportation and Warehousing, and Accommodation and Food and Beverage Provision demonstrated strong growth in 2023, highlighting new areas of economic momentum. This reflects Bandung City's ongoing economic diversification and adaptation to post-pandemic realities and digital transformation trends.

6.1. Research Implications

This study provides valuable insights for regional policymakers, business stakeholders, and urban planners. The findings emphasize the need to support not only the dominant sectors but also to nurture emerging industries that show high growth potential. For policymakers, the rising contribution of the Information and Communication sector indicates an opportunity to strengthen Bandung's position in the digital economy by investing in infrastructure, digital literacy, and innovation ecosystems. The strong performance of the health and logistics sectors underscores the importance of resilience and preparedness in essential services, particularly in a post-pandemic context. Moreover, the rebound in

tourism-related sectors suggests the importance of sustained investment in creative and cultural economies. Academically, the study reinforces the relevance of sectoral analysis in understanding urban economic transformation and provides a methodological reference for similar regional studies.

6.2. Future Research Directions

Future studies could explore several areas to deepen the understanding of Bandung City's economic development. First, a comparative analysis with other major Indonesian cities could provide broader insights into urban economic competitiveness and specialization. Second, micro-level analysis using firm-level or household-level data would provide more granular insights into how different sectors influence income distribution, employment, and productivity. Third, considering the growing importance of the digital economy, future studies could investigate the role of innovation, startups, and digital infrastructure in shaping Bandung's economic trajectory. Ultimately, integrating environmental and sustainability dimensions into economic analysis is essential to align urban economic growth with green development goals.

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References

- Azaki, N. (2024). Location Quotient and Shift Share Analysis for Sragen Economic Potential. *Journal of Transformative Governance and Social Justice*, 2(1), 11-24.
- Badan Pusat Statistik Kota Bandung. (2024). *Produk domestik regional bruto Kota Bandung menurut lapangan usaha 2020–2023*. <https://bandungkota.bps.go.id>
- Badan Pusat Statistik. (2003). *Indonesian population projection 2020–2050: Results of the 2020 population census*. Central Bureau of Statistics.
- Badan Pusat Statistik. (2021). *Book 3: Concept and definition of Podes 2021*. Central Bureau of Statistics.
- Badan Pusat Statistik. (2022a). *Book 4: National socio-economic concepts and definitions 2023*. Central Statistics Agency.
- Badan Pusat Statistik. (2022b). *Sakernas enumeration guidelines book, August 2023*. Central Statistics Agency.
- Badan Pusat Statistik. (2023a). *Statistics Indonesia 2023*. Central Bureau of Statistics.
- Badan Pusat Statistik. (2023b). *Produk domestik regional bruto menurut kabupaten/kota* [Gross regional domestic product by district/city]. <https://www.bps.go.id>
- Badan Pusat Statistik. (2023c). *West Java Province in figures 2023*. Central Bureau of Statistics of West Java Province.
- Badan Pusat Statistik. (2023d). *Statistics of people's welfare of West Java Province 2023*. Central Bureau of Statistics of West Java Province.
- Badan Pusat Statistik. (2023e). *Bandung City in figures 2023*. Central Bureau of Statistics of Bandung City.
- Begg, D., Fischer, S., & Dornbusch, R. (2021). *Economics* (10th ed.). McGraw Hill Education.
- Directorate of Statistics Dissemination. (2023). *BPS publication preparation guidelines: 2023 edition*. Central Statistics Agency.
- Firman, T. (2020). Urban development and spatial policy in post-Suharto Indonesia: Challenges for promoting sustainable growth in Bandung Metropolitan Area. *Southeast Asian Studies*, 9(2), 245–267.
- Jones, C. I., & Klenow, P. J. (2016). Beyond GDP? Welfare across countries and time. *American Economic Review*, 106(9), 2426–2457. <https://doi.org/10.1257/aer.20130339>

- Krugman, P. (1994). Past and prospective causes of high unemployment. *Reducing unemployment: Current issues and policy options*, 49-80.
- Kogoya, Y., Walewangko, E. N., & Tumilaar, R. L. H. (2020). Analysis of economic structure and economic growth in Lanny Jaya Regency. *Jurnal Berkala Ilmiah Efisiensi*, 20(2), 68-79.
- Laudati, D., Mariani, M. S., Pietronero, L., & Zaccaria, A. (2023). The different structure of economic ecosystems at the scales of companies and countries. *Journal of Physics: Complexity*, 4(2), 025011. <https://arxiv.org/abs/2202.01804>
- Lestari, E. K., & Jannah, O. M. A. (2019). Analysis of economic structure based on input-output approach in East Java Province. *Jurnal Ekonomi Pembangunan*, 8(1), 26-36.
- Liem, Y. (2024). Analysis of economic structure and economic growth in Banyumas Regency. *MANABIS (Jurnal Manajemen dan Bisnis)*, 3(2), 36-44. <https://doi.org/10.54259/manabis>
- Lina, J. Y., & Xing, H. (2023). Endogenous structural transformation in economic development. 1-38 *arXiv*. <https://arxiv.org/abs/2011.03695>
- Mankiw, N. G. (2020). *Principles of economics* (9th ed.). Cengage Learning.
- Diano, M., Amir, A., & Zulgani, Z. (2024). Analisis struktur dan sumber pertumbuhan ekonomi Provinsi Jambi. *Jurnal Paradigma Ekonomika*, 19(1), 234-247.
- Ministry of Tourism and Creative Economy, Republic of Indonesia. (2023). *Tourism statistics and trends 2023*. <https://www.kemenparekraf.go.id>
- Nugroho, Y., Siregar, M. A., & Laksmi, S. (2022). Digital economy in Indonesia: Policy narratives and evidence. *Journal of Digital Policy, Regulation and Governance*, 24(2), 123-140. <https://doi.org/10.1108/JDPRG-07-2021-0094>
- Organisation for Economic Co-operation and Development (OECD). (2021). *OECD regional outlook 2021: Addressing the COVID-19 regional divide*. <https://doi.org/10.1787/17017efe-en>
- Organisation for Economic Co-operation and Development (OECD). (2023). *Indonesia economic snapshot – Economic forecast summary*. <https://www.oecd.org/economy/indonesia-economic-snapshot>
- Porter, M. E. (1990). *The competitive advantage of nations*. Free Press.
- Samuelson, P. A., & Nordhaus, W. D. (2010). *Economics* (19th ed.). McGraw Hill Education.
- Smith, A. (2018). *The theory of moral sentiments* (Rev. ed.). Modern Library. (Original work published 1759)
- Suwantoro, G. (2019). *Dasar-dasar pariwisata* (6th ed.). Penerbit Andi.
- Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson.
- United Nations Conference on Trade and Development (UNCTAD). (2021). *Digital economy report 2021: Cross-border data flows and development*. https://unctad.org/system/files/official-document/der2021_en.pdf
- United Nations Development Programme (UNDP). (2019). *Human development report 2019: Beyond income, beyond averages, beyond today – Inequalities in human development in the 21st century*. <https://hdr.undp.org>
- World Bank. (2019). *Indonesia economic prospects: Advancing with resilience*. <https://www.worldbank.org>
- World Bank. (2022). *Indonesia economic prospects: Charting the course*. <https://www.worldbank.org>
- World Health Organization (WHO). (2022). *Global health expenditure report 2022*. <https://www.who.int/publications/i/item/9789240064911>